breed on the island. Wharton describes the bird as not at all common in autumn or early winter, very common from January to March, but rare in April : Whitehead saw none after March, and says it is not nearly so common as the Wood-Lark ; while Backhouse found it very abundant in January near Ajaccio, and Parrot only met with three individuals on the Campo de L'Oro on March 1 during the whole of his stay. Two specimens obtained by Parrot had remarkably short wings (96 and 103 mm.), and are ascribed by him to the Mediterranean race.

[To be continued.]

VIII.—On the Birds collected by Mr. Claude H. B. Grant at various Localities in South Africa. By W. L. SCLATER, M.A., F.Z.S., M.B.O.U. With Field-Notes by the Collector.

(Plates III. & IV. and Text-figures 8 & 9.)

For a period of nearly five years Mr. Claude Grant was engaged in forming a collection of the Vertebrates of South Africa. The cost of this exploration was entirely borne by Mr. Charles D. Rudd.

The choice of localities to be visited and the general direction of the matter was left to Mr. Oldfield Thomas, while the primary object of the exploration was to increase the collection of Mammals in the National Collection, a result which was amply accomplished, and is fully detailed in the series of papers published by Messrs. O. Thomas and H. Schwann in the 'Proceedings of the Zoological Society of London' for the years from 1904 to 1908.

In the intervals, however, of trapping small Mammals, Mr. Grant found time to make a very extensive collection of bird-skins. These, apart from the novelties, are a most valuable addition to the British Museum, as the South African series there was previously in some respects singularly deficient.

The following is a dated itinerary shewing the various localities at which birds were collected, all of which will be found in the sketch-map (text-fig. 8, p. 213).

1903. Jan. 29–Feb. 10.	Slopes of Table Mt., near Capetown.			
" Feb. 22-Mch. 8.	Tokai, ,, ,,			
" Mch. 11-Mch. 18.	Durban Road, ,, "			
" Mch. 30.	Port Nolloth, Little Namaqualand.			
" Apl. 2–July 16.	Klipfontein, ,, ,,			
" [Apl. 1, May 27, Ju	L			
, July 28-Sept. 4.	Port Nolloth, ", "			
" Sept. 16-Sept. 27.	Durban Road, near Capetown.			
" Oct. 24-Feb. 4.	Sibudeni and Jususie Valley, Zululand.			
1904. Feb. 29-Apl. 18.	Wakkerstroom, S.E. Transvaal.			
" Apl. 23-May 21.	Zuurbron, "			
,, June 24-Sept. 15.	Umfolosi Station, Zululand.			
" [Aug. 14, 17.	Ntambana Hills;			
,, Aug. 15.	Umzinele River;			
" Aug. 20–24.	Hluhluwe Stream;			
,, Aug. 24.	Somkele, Zululand.]			
,, Sept. 24-Oct. 26.	Ngoye Hills, Zululand.			
,, Nov. 4.	Durban, Natal.			
" Nov. 7-Nov. 21.	Illovo, "			
,, Dec. 15-Feb. 19.	Knysna, Cape Colony.			
1905. Feb. 20-Mch. 26.	Plettenberg Bay, "			
" Apl. 1–Apl. 23.	Knysna, ,,			
" May 10–June 20.	Woodbush, N.E. Transvaal.			
,, July 8.	Swali Nek, "			
,, July 12-Sept. 26.	Klein Letaba, "			
" Nov. 1–Feb. 14.	Woodbush, "			
1906. Feb. 20-Mch. 11.	Pietersburg, "			
" Mch. 14-Mch. 27.	Turfloop, "			
" Apl. 20-May 18.	Legogot, E. Transvaal.			
" June 14–Sept. 12.	Coguno, Portuguese E. Africa,			
" Oct. 23–Nov. 18.	Masambeti, ", "			
,, Nov. 22–Feb. 24.	Beira, ", "			
1907. Mch. 12-July 18.	Tambarara, ,, ,,			
" Aug. 12–Sept. 22.	Tete, ,, ,,			

Collecting was begun early in 1903 round Capetown at Tokai, the forest-school on the slopes of Table Mountain, and at Durban Road, a railway-station about ten miles from Capetown, on the main line up country.

The period from April to September, 1903, was spent in the desert-like country of Little Namaqualand, in the northwest corner of Cape Colony. Most of the time was spent at Klipfontein, a place about fifty-four miles inland from Port Nolloth on the Cape Copper Company's railway, at an elevation of about 3100 ft., on the edge of the plateau; some days at Anemous, a few miles nearer the sea, at 1800 ft.; the rest at Port Nolloth in the desolate coastal plain.

From October 1903 to February 1904 the time was occupied in collecting at Sibudeni (1100 to 1700 ft.) and in the Jususie or Insuzi Valley, a bush and forest country about twenty miles west of Eshowe in Zululand. The rest of the Zululand collection was made later in the same vcar between June and October. The chief and most productive collecting-place was Umfolosi (or Umvolosi), a Station on the Zululand railway about three miles from the river of the same name and fifteen miles from the sea. Here the elevation was only from 100-200 ft. above the sea-level. Other localities, a few miles to the north, such as Somkele and the Hluhluwe Stream, were also visited, but very few birds were taken there. Finally, a month was spent in the Ngoye or Umgoye forest, about fifteen miles east of Eshowe and about six or eight hundred feet above the sea, which is some eight miles away.

The summer months of 1904-5 were again spent in Cape Colony, at Knysna, and at Plettenberg Bay, a few miles to the east. Knysna is historic ground; it is the nearest bit of true forest to Capetown, and was visited by all the earlier South African naturalists and travellers—Levaillant and Lalande, Victorin and Andersson, and many others. The ground rises very steeply from the sea to about 4000 ft. and is covered with magnificent forest, and it is here that forest birds—Trogons, Touracos, and Parrots—are first met with.

Grant also spent a good many months in the eastern part of the Transvaal, visiting first, in the winter of 1904, Wakkerstroom, a well-known place in the south-east corner of the Transvaal, at an elevation of about 5500 ft., and therefore well on the "high veld," and a smaller place, Zuurbron, about twenty miles further east, at the slightly lower elevation of 4800 ft. From May 1905 to March 1906 he was in the Zoutspansberg district in the North-East Transvaal, spending part of the time, July to September, at Klein Letaba, a small "dorp" on the Letaba River, in 23° 21' S., 30° 40' E. This was a fever-laden spot in the "low veld" lying below the Drakensberg escarpment, at about 1000 ft. above the sea. Three summer and two winter months were passed at Woodbush on the "high veld" about thirty miles N.E. of Pietersburg, at about 4500 ft., close to the escarpment, and a short time at Pietersburg itself and at Turfloop, halfway between Pietersburg and Woodbush. Legogot, the last place visited, is in the Barberton district at about 3000 feet elevation, a few miles north of the Pretoria-Delagoa Bay railway.

From June 1906 to September 1907 Grant was in Portuguese East Africa. Coguno, the first place visited, is about seventy-five miles S.W. of Inhambane. The country is forest and dense bush and rather flat, probably in all cases under 1000 ft. in elevation. Then Beira, the port of Rhodesia, was reached, and Masambeti, a place on the railway about twenty-three miles from Beira. Here the country was low-lying and flat, with patches of open land and forest alternating, all of which is flooded in the rainy season. Tambarara is a place on the south-west slopes of the Gorongoza Mountains, at about 1000 ft. The mountains themselves, which rise to 5200 feet, were found to be practically inaccessible; they are situated a little north of the railway from Beira to Umtali and about halfway between the two places. Finally, the last place visited was Tete, a well-known spot on the Zambesi, where Dr. Peters did a great deal of collecting in the middle of the last century. Mr. Grant's work was chiefly done about twenty miles south of Tete, at the junction of the Luenya and Mazoe Rivers.

Mr. Grant's collection during these five years comprised 3527 skins, representing 591 species. In the Check-list which I compiled in 1905 I estimated the number of species and subspecies of South-African birds at 868, so that, although no sea-birds were collected, Mr. Grant was able to bring home examples of almost three-quarters of the total known number of South-African birds. Taking the collection by localities, it may be divided as follows :---

Little Namaqualand	68 species,		370 examples.	
Capetown district	48	"	157	"
Knysna district	81	"	283	"
Natal and Zululand	187	"	778	,,
Transvaal	263	"	1167	"
Portuguese East Africa	122	,,	772	,,

The new species are eight in number: six of these have been already described, by Sharpe, Grant and myself in the Bulletin of the B.O.C.; they are as follows:—Pyrenestes granti Sharpe, Heteronyx ruddi, Cinnyris neergaardi, Apalis ruddi, and Sphenœacus transvaalensis Grant, and Apalis claudei W. Scl.

Two additional subspecies, *Pratincola torquata orientalis* and *Cossypha caffra namaquensis*, are here described for the first time.

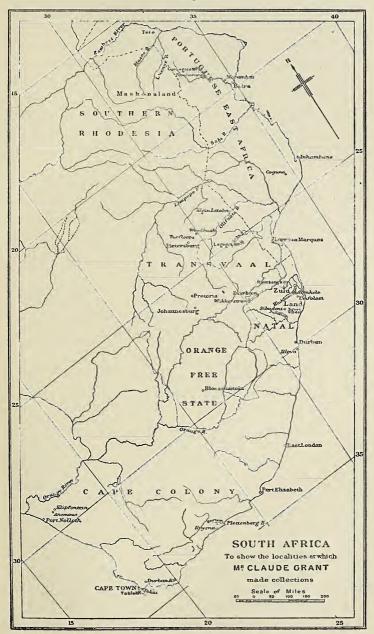
Fourteen species previously only known from East Africa or elsewhere have been added to the Avifauna of South Africa; some of these were also recorded by Grant in the aforesaid Bulletin. The following is a complete list of them :—Pytelia afra, Quelea erythrops, Mirafra rufocinnamomea, Mirafra zombæ, Cinnyris verreauxi fischeri, Sigmodus scopifrons, Batis puella soror, Chætura böhmi, Merops superciliosus, Campothera malherbei fülleborni, Turacus reichenowi, Vinago wakefieldi, Chalcopelia afra (as now restricted to the Blue-spotted Dove), and Francolinus granti.

In addition there are included examples of a number of exceedingly interesting and rare species previously unrepresented or very inadequately represented in the National Collection.

This is, without doubt, the most important and extensive single collection of South-African birds which has ever been made, and I may perhaps be allowed to congratulate Mr. Grant on the success of his efforts and Mr. Charles Rudd for his most generous subvention which made the expedition possible.

I have to thank Mr. Ogilvie-Grant for allowing me the





SKETCH-MAP OF PART OF SOUTH AFRICA.

privilege of working out this extensive collection and for his help and advice in so doing.

The classification and nomenclature follows almost exactly the "Check-list of South-African Birds," published by me in 1905 (Annals S. Afr. Mus. iii. pp. 303–387), which is founded on the four volumes of the 'Birds of South Africa,' by myself and Dr. Stark.

The numbers in front of the names of the birds are those in the above-mentioned Check-list. Where a species does not occur in the check-list a reference is given to Reichenow's 'Vögel Afrikas.'

In order to save space and reduce the size of this paper, the specimens of each species collected are arranged under the headings of **CC.**, **N.**, **Z.**, **Tv.**, and **P.**, standing for Cape Colony, Natal, Zululand, Transvaal, and Portuguese East Africa respectively. Only the month of capture is given, unless the bird is known to be a migrant, and the number of specimens from each locality is placed in brackets. All the localities will be found in the sketch-map (text-figure 8, p. 213). Mr. Claude Grant's field- and other notes are enclosed in square brackets to distinguish them from my own comments.

1. CORVULTUR ALBICOLLIS.

Z. Sibudeni, Dec. 16 (4); **P.** Tambarara, Mch. (1).

[" Ikwaubaba " of Zulus.

The White-necked Raven was observed in almost every locality visited and is usually found in pairs. In the way of food nothing appears to come amiss to it. The call is a harsh croak, very similar to that of the European Raven, and the flight is strong and very powerful. This bird breeds in holes and ledges on krantzes, but I have not succeeded in taking the eggs.]

2. CORVUS SCAPULATUS.

Tv. Pietersburg, Mch. 2 (1); **Z.** Ntondweni, Aug. (1); Umfolosi, Sept. (1); **P.** Coguno, June (1).

["Bonte Kraai" of Colonists.

The Black-and-White Crow was seen in many localities

visited, and was the commonest of the Crows in the Portuguese country. It is usually found in pairs and, like the Raven, feeds upon almost everything. I found it breeding at the Cape, the nest being placed high up in a gum-tree, but no eggs had been laid up to the time I left. The cry is harsh.]

3. Corvus capensis.

CC. Klipfontein, Apl., May (5); **Tv.** Wakkerstroom, Mar., Apl. (12); **Z.** Umfolosi Station, July (1); Hluhluwe Stream, Aug. (1).

Four eggs taken at Port Nolloth, Aug. 12, 1903.

The Zululand Crows are on average slightly smaller than those from Namaqualand, and approach *C. capensis minor* from East and North-East Africa. The wing-measurements of the Namaqualand birds are all over 355 mm., while those of the Zululand birds are below it.

["Swart-kraai" of Colonists.

The Cape Crow was noted everywhere, except in the Portuguese country. It is usually seen in pairs, and in many ways reminds one of the European Rook. A nest containing four eggs was taken in Namaqualand in August; this was composed of sticks and placed on the top of a large bush. The female was put off, but she was too wild to secure.]

5. BUPHAGA ERYTHRORHYNCHA.

Tv. Legogot, May (2); Klein Letaba, Aug. (1); **Z.** Sibudeni, Oct. (1), Jususie Valley, Dec. (3).

[" Echlala-nyati" of Zulus.

Natal and Zululand, the Eastern and North-Eastern Transvaal, and the Beira district of the Portuguese country are the localities in which I have usually seen the Ox-pecker. It is generally found in pairs or threes, and always in the company of cattle and horses, feeding on the ticks which infest these animals, often pecking deep holes in the hide in extracting the ticks and thereby frequently doing more harm than good. Its actions when settled are graceful and gliding, while it is able to cling to any part of the animal on which it is resting. The flight is undulating and the call is a hissing "zee."

When disturbed it will sometimes perch on the tops of trees, but more often flies clean away.

The soft parts are :---Irides blood-orange; eyelid lemoncoloured; bill sealing-wax red; legs and toes grey-brown.

N.B.—The iris is composed of two colours, the inner part being blood-orange, with a narrow outer ring of lemon-yellow.]

6. CREATOPHORA CARUNCULATA.

CC. Durban Rd., Sept. (10); Tv. Klein Letaba, Aug. (1).

Two of the males have quite bare heads and are doubtless very old birds; in the others the amount of bare skin and the development of the wattles varies a good deal and no two are exactly alike. The females shew no sign of wattles and have only the thin streaks and patches round the eyes bare.

[The Wattled Starling was noted from the Cape Peninsula, the North-Eastern Transvaal, and the Inhambane and Beira districts of the Portuguese country. It is always found in flocks, often of considerable size. In habits and flight it greatly resembles the European Starling.

The soft parts are :---

3, breeding. Irides hazel; bill almost like ivory; bare skin behind eye greenish, rest of pale skin lemon-yellow; all the dark skin black.]

7. Amydrus morio.

CC. Tokai, Feb. (1); Table Mt., Jan. (1); Plettenberg Bay, Feb., Mch. (5); Knysna, Apl. (1); **Tv.** Wakkerstroom, Mch. (1); Zuurbron, May (3); Woodbush, June (3); Turfloop, Mch. (1); **Z.** Sibudeni, Oct. to Jan. (8).

["Esome" of Zulus. "Rooi-vlerk sprew" of Colonists.

The Red-winged Starling frequents more or less mountainous country, and was noted from the Cape Peninsula, the Knysna district, Zululand, and the South-Eastern, Eastern, and North-Eastern Transvaal. It was observed both

in pairs and small parties, more usually the former, and is rather wild and difficult to approach. The flight is swift and often high overhead, and the call is a whistle. As a rule, it sleeps and breeds on ledges in the more inaccessible positions in the mountains.

The soft parts are :---Irides dark brown; bill, legs and toes black.]

8. AMYDRUS CAFFER.

CC. Klipfontein, Apl. to June (9).

As compared with birds collected at Deelfontein (Sharpe, 'Ibis,' 1904, p. 366), the Namaqualand birds are rather shorter in the wing, averaging about 145 mm. against about 155.

I have not been able to find the Port Elizabeth example of this species mentioned by Reichenow as being in the British Museum. He distinguished it by its darker colour and larger size as var. *intensetincta*, and perhaps the Deelfontein birds may be referred to this race, as was done by Sharpe.

[The Pale Red-winged Starling was only found in Namaqualand, where it is quite plentiful. In appearance and habits it greatly resembles A. morio, except that in the winter season it congregates in much larger parties than that species does.

The soft parts are :--Irides bright yellow; bill, legs and toes black.]

9. SPREO BICOLOR.

Tv. Wakkerstroom, Mch. (8).

[Since the Central Cape Colony trip I have only noted this Starling on the high upland veld in Northern Zululand and Natal and the South-Eastern Transvaal. It is gregarious in habit and very noisy, and spends much of its time around herds of cattle, apparently feeding largely on ticks and flies that are attracted by those beasts.

The soft parts are :--Irides pale yellow; bill black, yellowish at base of lower mandible and gape; legs and toes black.]

10. LAMPROTORNIS MEVESI.

P. Tete, Aug., Sept. (6).

[Meves's Glossy Starling was only found in the Tete district, where it was very plentiful between the Mazoe and Luenya Rivers and the Zambesi. It is usually found in pairs and feeds largely upon wild fruit, berries, &c., for which it is often seen searching on the ground, where it presents much of the appearance of a small Magpie. The flight is strong, but not so fast as that of other Glossy Starlings, and the cry is loud and clear.

The soft parts are :--Irides yellow ; bill and legs and toes black.]

15. LAMPROCOLIUS PHENICOPTERUS BISPECULARIS.

CC. Klipfontein, Apl., May (2); **Tv.** Woodbush, June (2); Legogot, May (1); **Z.** Jususie Valley; Umfolosi Station, Aug. (1).

All these birds should perhaps be referred to L. p. bispecularis, which only differs from the typical form by its smaller dimensions.

Measurements of the series in the British Museum shew that examples from Southern Cape Colony average about 140 mm. in wing-measurement; those from Natal and the Transvaal are slightly smaller, while those from German South-West Africa are smaller still. The Namaqualand examples in the present collection are both females, and the wings are only 115 mm., so they certainly should be referred to the smaller race.

["Ekweze" of Zulus.

This species was noted from Namaqualand, Zululand, and the Eastern and North-Eastern Transvaal. It is found in flocks, often of some numbers, and feeds principally upon the fruit and berries of indigenous plants. In the dry country like Namaqualand it was only found in the vicinity of water in bushy kloofs. The flight is swift and strong, like that of a true Starling, and the cry is loud and clear.

The soft parts are :--Irides bright orange-yellow; bill, legs and toes black.]

17. LAMPROCOLIUS SYCOBIUS.

Tv. Klein Letaba, Aug., Sept. (6); **P**. Tambarara, Apl. (2); Tete, Aug. (2).

The two examples from Tambarara in the Gorongoza Mts. are distinctly smaller than those from the Transvaal or Tete; the wings measure 113 against 125 to 135. The throat is green like the breast and not steely blue, and the purple patch on the ear-coverts is much smaller. As both the examples are females and one is a young bird, it seems unwise to make a new subspecies, but the evidence certainly seems to point to a distinct racial form.

["Kwesu" of Machangaan.

This species was only found in the North-Eastern Transvaal and the Gorongoza and Tete districts of the Portuguese country. I have always observed it in flocks of twenty and upwards, and it feeds principally upon fruit and berries, especially those of the "Mtuma" tree, the "Num-num," and "Caoutchoue." It has a loud ery and swift flight, and is not easily distinguishable from *L. phænicopterus*.

The soft parts are :--Irides bright yellow; bill, legs and toes black.]

18. LAMPROCOLIUS MELANOGASTER.

N. Illovo, Nov. (5); **Z.** Sibudeni, Nov., Dec., Jan. (9); Ngoye Hills, Oct. (1); **P.** Masambeti, Nov. (1); Beira, Febr. (1).

[" Ekweze" of Zulus.

The Black-billed Glossy Starling was found in Natal and Zululand and the Beira and Gorongoza districts of the Portuguese country. It frequents more or less forested country, and often occurs in flocks of several hundreds; like the other members of the genus, it feeds principally upon fruit and has a clear call-note.

The soft parts are :---

Adult. Irides bright yellow; bill, legs and toes black. Jun. Irides hazel; bill, legs and toes black.]

19. CINNYRICINCLUS VERREAUXI.

P. Tambarara, Mch., Apl. (6); Beira, Nov., Jan., Febr. (5); Masambeti, Nov. (4).

[Young males in first plumage are similar to the adult female, but can usually be distinguished by the under tailcoverts being pure white and with only one or two spots. Females in their first plumage can only be distinguished from adult females by the broader and more sandy edges of the feathers of the mantle and wings.

Verreaux's Glossy Starling was only found in the Beira and Gorongoza districts of the Portuguese country. The old birds were noticed in pairs and the young ones in flocks of twenty or more. Like the other Glossy Starlings it lives principally on wild fruit and berries. It has a strong, swift flight and the call is clear and somewhat loud, but very different from that of other Glossy Starlings. It breeds as a rule in the hollow of a decayed tree, but although I found several occupied sites none contained eggs.

The soft parts are :---Irides pale yellow; bill and legs and toes black. In the young bird the gape is yellowish.]

20. ORIOLUS GALBULA.

Tv. Wakkerstroom, March 5 (1).

[The single specimen of this Oriole seen and secured was solitary, and frequented the tall gum-trees bordering some farm-lands.

The soft parts are :---Irides red; bill dark flesh-coloured; legs and toes slate-coloured.]

21. Oriolus notatus.

P. Tambarara, March 12 (1).

[A small party of this species of about four to six individuals, one of which was secured, were seen in the tops of some tall teak trees in the Gorongoza forest. The call was a whistle, and until I picked the specimen up I took it to be *O. larvatus*.]

22. Oriolus larvatus.

CC. Knysna, Dec., Jan. (5); **Tv.** Woodbush, May (1); Legogot, May (3); **Z.** Sibudeni, Jan. (2); Ngoye Hills, Sept., Oct. (4); **P.** Coguno, Aug. (2); Masambeti, Oct. (1).

[The Black-headed Oriole was found in all forested localities from the Knysna, eastwards and northwards to the Zambesi. It is essentially a bird of the woods and forests, and is wild and wary, keeping continually on the move and uttering incessantly a loud clear whistle. It goes both singly and in pairs, and usually keeps to the tops of the larger trees.

The soft parts are :---

Adult. Irides rich red; bill dark flesh-coloured; legs and toes slate-coloured.

Immature. Irides brown; bill black; legs and toes slatecoloured.]

23. HYPHANTORNIS NIGRICEPS.

P. Beira, Dec. (4).

One adult male is typical; another sexed as male, which is as large as the male, closely resembles the female and is probably a bird of the year. There is very little white on the lower side of the female or young male.

[The Black-headed Weaver was only found in the Beira district, where it was not uncommon. It was mostly seen in pairs and was breeding, although small parties of nonbreeding birds were noticed frequenting the native gardens. The nests were hung in bamboo brakes or in the thin branches of trees in damp situations, but unfortunately not one that I examined contained eggs or young. In call and song this species resembles the other Yellow Weavers.

The soft parts are :--

♂, breeding. Irides rich orange; bill black; legs and toes horn-brown.

2. Irides yellow; bill, legs and toes horn-brown.]

26. HYPHANTORNIS SPILONOTUS.

Tv. Klein Letaba, July, Sept. (2); Woodbush, Dec., Jan. (10); **Z.** Jususie Valley, Dec. (2); Ngoye Hills, Oct. (3); **P.** Coguno, Aug. (6).

The series taken at Coguno in August is most interesting; it shews the males gradually assuming the bright breeding plumage. The youngest of these is very like the SER. IX.—VOL. V. R female but ashy grey below; a few bright yellow feathers are beginning to appear; another example shews small black feathers on the throat pushing up through the pale yellow, while the yellow-edged black feathers on the back which form the "spotted back" of the adult are beginning to appear. One killed on August 31st is in full breeding plumage. Young birds of both sexes have only the throat pale yellow, the rest of the under parts dull white. I cannot distinguish the females of H. nigriceps and H. spilonotus with certainty, except that the lower mandible of the former appears to be a good deal paler.

["Umdwesa" of Zulus.

The Spotted-backed Weaver was noted from Zululand, the North-Eastern Transvaal, and the Inhambane district of Portuguese East Africa. It is usually seen throughout the year in flocks, often of considerable numbers, which frequent cultivated lands. It is a noisy bird, keeping up a continual chatter or uttering a rasping sort of "song". It was breeding in numbers at Woodbush, fixing the nest at the tip of an overhanging branch of a tree usually over water, often in quite inaccessible situations; unfortunately none of the nests that I was able to reach contained eggs.

The soft parts are :--

 \mathcal{J} . Irides rich orange-red ; bill black ; legs and toes horn-brown.

2. Irides yellow; bill, legs and toes horn-coloured.]

HYPHANTORNIS TAHATALI.

Hyphantornis shelleyi Sharpe, Stark & Sclater, Bds. S. Afr. i. p. 62.

Ploceus auricapillus Sw., Reichenow, Vög. Afr. iii. p. 79.

Tv. Klein Letaba, Aug., Sept. (4); P. Tete, Sept. (1).

The type of *Ploceus tahatali*, renamed and figured subsequently by Sir Andrew Smith in the 'Illustrations of the Zoology of South Africa,' Aves, pl. 103, is preserved in the British Museum; it was procured in winter at Kurrichane, and is without doubt the same as the bird commonly known as *H. shelleyi*.

The curious pink tinge on the under parts, which I have also observed in birds collected by Dr. Stöhr north of the Zambesi, is, according to Mr. Grant, due to the stains of fruit juice on which the bird feeds. There is a very similar example in the British Museum from Colesberg, Cape Colony, collected many years ago by Ortlepp. This is referred to *H. cabanisi* by Dr. Finsch, but I doubt if the true *H. cabanisi* goes so far south. But the females and winter males of this group are notoriously difficult to distinguish.

[Shelley's Weaver was only found in the North-Eastern Transvaal and the Tete district of the Portuguese country. It was quite common in both localities, and frequented the lands in fair numbers, feeding on the grain. It also feeds to some extent on wild fruit, and the feathers of the under parts are often stained with the juice, especially with that of the "Num-num." In habits and call it resembles the other members of the genus.

The soft parts are :--Irides pale yellow ; bill, legs and toes horn-brown.]

29. HYPHANTORNIS XANTHOPS.

Hyphantornis jamesoni Stark & Sclater, Bds. S. Afr. i. p. 65. **Tv.** Woodbush, Dec. (2); **P.** Coguno, June (1); Tambarara, Apl. (1).

An adult male (Woodbush, Dec. 29) exactly matches the type of *H. xanthops* from Angola and other examples from Nyasaland. *H. jamesoni*, described from a specimen taken by J. S. Jameson on the Umvuli River, differs from *H. xanthops* in having only the forehead instead of the whole crown golden. It was shot in September, and is probably a bird which has hardly yet assumed its full breeding dress.

30. SITAGRA OCULARIA.

N. Illovo, Nov. (3); Z. Jususie Valley, Dec. (1); Umfolosi Station, Sept. (1); P. Coguno, July (1); Beira, Nov. (3); Tambarara, Apl. (2).

One nest with two young (in spirit), taken at Illovo on November 19th. Two young males from Tambarara shew little trace of the characteristic black eye-streak.

[Smith's Weaver was noted from Natal and Zululand, the Eastern Transvaal, and the Inhambane, Beira and Gorongoza districts of the Portuguese country. It is found in pairs or family parties, never in flocks; it frequents low bushes, trees and thick undergrowth, feeding principally upon insects. The call is a clear low whistle, and this is the only note that I have heard it utter.

The nest is hung from the end of a fine twig or bamboo at the edge of a wood or in the depths of the forests, not necessarily near water. It is composed of fine grass and is globular in shape, with a long pendent tubular entrance.

The soft parts are :---

Ad. Irides yellow; bill black; legs and toes slate-coloured.

Juv. Irides very pale; bill yellow-horn-coloured; legs and toes paler slate-coloured.]

32. SITAGRA CAPENSIS.

CC. Durban Rd., Mch., Sept. (4); Klipfontein, April, May, June, July (10); Plettenberg Bay, Mch. (2).

[The Cape Weaver was only found in Namaqualand, the Cape Peninsula, and the Knysna district. It often occurs in flocks of great numbers, and frequents indiscriminately bush-filled kloofs, borders of woods and cultivated lands, feeding to a large extent on wild fruit and berries. In call and general habits it greatly resembles *Hyphantornis velatus*.

The soft parts are :---

3 breeding. Irides yellow; bill black; legs and toes horn-brown.

3 winter & 9. Irides pale brown; bill horn-coloured.]

33. SITAGRA CAPENSIS OLIVACEA.

Z. Umfolosi River, July (1); Tv. Woodbush, Dec., Jan.(3).

[This species was only found in Zululand and the North-Eastern Transvaal, where it frequented reedy rivers and streams in company with *Hyphantornis spilonotus*. In habits it resembles the true *S. capensis*.]

34. SYCOBROTUS GREGALIS.

N. Illovo, Nov. (3); **Z.** Sibudeni, Nov., Febr. (2); Ngoye Hills, Sept., Oct. (3).

The three examples from the Ngoye Hills have traces of white tips to the feathers of the forehead, and are intermediate in character between *S. gregalis* and *S. stictifrons*, though slightly nearer the former.

[Natal and Zululand are the only two countries in which I have noted this Weaver. It is usually found in pairs and frequents wooded and forested country, where its well-known note at once betrays its presence. It spends the greater part of its time climbing among the denser foliage of the trees, and apparently feeds largely upon insects.

The nest is hung from an overhanging creeper or bamboo, and has a long pendent tubular entrance, but all that I have seen have been in course of construction and have been without eggs.

In Lower Natal this species is known by the name of the "Musical-box" bird, apparently because its call sounds somewhat like that instrument being wound up.

The soft parts are:-Irides dark horn-coloured; bill blueslate-coloured; legs and toes fleshy brown.]

35. Sycobrotus stictifrons.

P. Masambeti, Nov. (2).

[This species was found in the Beira district, where it was not plentiful. In appearance and habits it exactly resembles S. bicolor.]

36. ANAPLECTES RUBRICEPS.

Tv. Klein Letaba, July $(1 \ \varphi)$.

[I have only seen this species in the low country of the North-Eastern Transvaal. In appearance and habits it resembles *H. shelleyi*, and I have probably overlooked it elsewhere owing to its resemblance to many of the Yellow Weavers.

The soft parts are :--Irides yellowish; bill yellow; legs and toes brown-horn-coloured.]

40. AMBLYOSPIZA ALBIFRONS.

N. Illovo, Nov. (8).

[This species was noted from Natal, where it was plentiful, and the Inhambane and Gorongoza districts of the Portuguese country, where only two or three individuals were seen. It frequents well-wooded localities, usually, I think, in pairs, and feeds largely on wild fruit and berries.

The soft parts are :---

 \mathcal{J} ad. Irides hazel; bill slate-coloured; legs and toes slaty brown.

 \Im im. & \Im ad. Bill yellowish horn-coloured; legs and toes paler.]

43. PLOCEIPASSER PECTORALIS.

P. Tete, Aug. (1).

[This Weaver was only noticed near Tete, on both the north and south banks of the Zambesi, and appeared to be very local, as no specimens were seen even such a little way to the south as my camp at the junction of the Mazoe and Luenya Rivers. I have always seen it in flocks of a dozen to twenty individuals; it spends much of its time on the ground, flying up and perching on the lower branches of the trees on being disturbed. It is found most commonly around native kraals, and probably to a large extent feeds on the native crops in their season. It has a loud call-note constantly repeated, and the flight is Weaver-like.

The soft parts are :-- Irides hazel; bill black; legs and toes sooty brown.]

44. Sporopipes squamifrons.

Tv. Pietersburg, Febr. (7).

[This striking species was only found in the open dry country near Pietersburg, where it was very plentiful and occurred in flocks, spending much of its time on the ground in search of grass-seeds, and seeming partial to the vicinity of habitations. It is a sociable species and many nests were found; these were placed in the numerous thorn-bushes, often several in one bush. They were composed roughly of long grass, the flowering ends projecting

outwards and forming a sort of porch to the entrance. The breeding season was apparently just over at the time of my visit, as only one nest still contained young. This is a tame and confiding little bird and easily secured.

The soft parts are :---Irides rich hazel; bill, lower mandible pearly white, upper pink; legs and toes fleshy. In the young the bill has black markings.]

Pyrenestes granti.

Sharpe, Bull. B. O. C. xxi. 1908, p. 67.

P. Beira, Dec. 27. 1906 (1 3, type of the species). Masambeti, Nov. 7 (3 juv.).

This species closely resembles *P. minor* (Shelley, Ibis, 1894, p. 20) from Nyasaland. It differs only in the greater extent of the red of the head, which reaches back over the whole crown, well behind the eyes and to the upper breast. It seems probable that the Beira bird is in full breeding plumage, while the only two examples of *P. minor* are in winter plumage; they were taken in August.

The second specimen from Masambeti has only a small spot of red near the gape and on the chin. It is obviously a young bird.

[This Weaver was only twice seen; on the second occasion a pair were together, but what was probably the female slipped away in the undergrowth. It frequents densely wooded localities, spending all its time amongst the lower branches and undergrowth, and greatly resembles in all its actions Lagonosticta niveoguttata. The call is a loud "zit."

The soft parts are :-- Irides dark claret-coloured ; bill black ; legs and toes horny brown.]

45. Pytelia melba.

Tv. Klein Letaba, Aug. (1); Turfloop (1).

[I have only found this little Finch in the North-Eastern Transvaal, but as it usually inhabits thick bush I have probably overlooked it elsewhere. On both the occasions when I secured specimens a pair were together. I have not heard its call-note, and it appears to spend its time among the lower parts of the thickets scarching for food. The soft parts are :---

 \mathcal{J} . Irides rich brown; bill rich red, culmen dusky; legs and toes pale brown.

 $\ensuremath{\mathbb{Q}}$. Irides hazel; bill brown tinged with red; legs and toes pale brown.]

PYTELIA AFRA.

Reichnw. Vög. Afr. iii. p. 162; C. Grant, Bull. B. O. C. xxi. 1908, p. 66.

P. Tambarara, June (1).

This is the first example of this species taken south of the Zambesi; it is not uncommon in Nyasaland and Angola.

[Only one specimen of this species was seen, and this was shot in thick forest at the edge of a cut road. I at first mistook it for P. melba, to which species it bears a strong resemblance in life.

The soft parts are :---Irides rich brown ; bill dark red; legs and toes pale brown.]

47. LAGONOSTICTA RUBRICATA.

Tv. Legogot, May (1); **Z**. Ngoye Hills, Oct. (1), Jususie Valley, Nov., Dec. (3).

["Ncubu" of Zulus. This little Waxbill was found only in Zululand and the Eastern Transvaal. It goes about in small parties and frequents footpaths and clearings near bush, feeding principally on seeds of various grasses. When feeding it constantly utters a low "zeep," and is tame and fearless.

The soft parts are :---Irides hazel; bill slate-coloured; legs and toes dark brown.]

48. LAGONOSTICTA JAMESONI.

Tv. Klein Letaba, Aug., Sept. (5).

Young birds are olive-brown above with a little patch of pink on the lores only, below they are paler olive-brown, but without any pink wash at first.

[Jameson's Waxbill was only taken in the "low veld" of the North-Eastern Transvaal, where it occurred in small flocks. In action, call, and habits it resembles *L. rubricata*.

The soft parts are :- Irides hazel; bill slate-coloured; legs and toes dark brown.]

48 a. LAGONOSTICTA HEMATOCEPHALA.

O. Neumann, Orn. Monatsb. 1907, p. 168.

P. Beira, Dec. (2); Tambarara, Mch., July (2).

Neumann has separated the East-African and Nyasaland form of this species from that occurring in Bogosland under the above name, retaining Heuglin's *L. rhodopareia* for the Bogosland form alone.

It had already been recorded under Heuglin's name from the Uremma River near Beira by myself (Ann. S. Afr. Mus. iii. 1905, p. 368).

[This little Waxbill was only found in the Beira and Gorongoza districts of the Portuguese country. It occurs in small flocks on the outskirts and in the paths and roads of the woods and forests, spending much time on the ground. In actions and habits it resembles *L. rubricata*.

The soft parts are :--Irides hazel ; bill slate-coloured ; legs and toes dark brown.]

49. LAGONOSTICTA BRUNNEICEPS RENDALLI.

P. Tete, Sept. (3).

The type of *L. brunneiceps* is from Maragaz in Abyssinia, that of *L. rendalli* from the Shire River. The type of the former is by no means typical, as it is quite as brown on the back as a Transvaal example, though as a rule specimens from North-East and Central Africa have more red than those from the Zambesi Valley and South Africa. The southern form may perhaps be retained as *L. brunneiceps rendalli*.

[This species was found only in the Tete district of Portuguese East Africa, where it was uncommon and occurred in small flocks in the native lands. In action and habits it resembles the other Ruddy Waxbills, being like them tame and easily procured.

The soft parts are :--Irides brown ; bill vinous red, with the culmen, cutting-edge of upper mandible, and ridge of lower black ; legs and toes pale horn-brown.] 50. Hypargus niveoguttatus.

C. Grant, Bull. B. O. C. xxi. 1908, p. 66.

P. Tambarara, June (1); Beira, Dec. (2).

The females of this and the following species are described by Grant in his note in the Bulletin.

[Peters' Spotted Finch was found only in the Beira and Gorongoza districts of the Portuguese country. It occurred in pairs or small parties in the thickets and the depths of the forests, usually frequenting roads and footpaths cut through the bush. It spends much of its time on the ground, feeding apparently on seeds of various kinds. It is a tame and somewhat inquisitive little bird. The usual call is not unlike that of other Waxbills, and the alarm-note is a harsh "chee."

The soft parts are:—Irides black; eyelid bluish; bill blue-slate-coloured; legs and toes slaty.]

51. LAGONOSTICTA MARGARITATA.

P. Coguno, Aug. (2).

[This long-lost Spotted Finch was rediscovered in the Inhambane district, where, curiously enough, no signs were seen of *L. niveoguttata*.

It was previously known only from Strickland's specimen purchased in Capetown, which was said to have come from Madagascar, and from examples said by Verreaux to have been procured at Capetown and figured by Des Murs.

It was observed in small parties frequenting the roads cut in the bush, and spent much of its time on the ground like other Waxbills. In fact, in all its actions it resembles *L. niveoguttata*.

The soft parts are :---Irides black ; eyelid bluish ; bill blueslate-coloured ; legs and toes pale slate-coloured.]

52. Estrilda Astrilda.

CC. Knysna, Apl. (1); **Tv.** Wakkerstroom, Mch. (1); Woodbush, Jan. (3); Klein Letaba, Sept. (3); Pietersburg, Mch. (2); Legogot, Apl., May (2); **Z.** Jususie Valley, Dec. (1); Umfolosi Station, July (10).

[This Common Waxbill was noted from Namaqualand (where a single small party was observed in one of the larger mountain ranges), the Knysna district, Zululand, and the South-Eastern, Eastern, and North-Eastern Transvaal. It is found in flocks in the winter and in pairs and flocks in the breeding-season, and spends the greater part of its time on the ground, in native lands, footpaths, and cut roads, feeding largely upon grass-seeds.

The soft parts are :---

Ad. Irides red; bill coral; legs and toes very dark horn-coloured.

Juv. Irides pale red; bill black, bluish white at gape; legs and toes horny.]

52 a. Estrilda Astrilda cavendishi.

P. Masambeti, Oct. (2); Beira, Dec. (1).

These Rooibeckjes are distinctly smaller and darker than those from the Cape and Transvaal, and agree very well with Sharpe's type of *Estrilda cavendishi* from the Cheringoma district of Mozambique.

54. Estrilda incana.

N. Illovo, Nov. (1); **P.** Coguno, Aug. (1); Beira, Feb. (2).

["Simbasili" of Ntebis.

The Grey Waxbill was found in Natal and the Inhambane and Beira districts of the Portuguese country. It is an uncommon species, and I have only observed a pair in each locality in which I have found it. It has much the habits of the other Waxbills.

The pair at Beira were breeding, but unfortunately I did not discover the half-finished nest till after I had shot them. It was placed in the upper branches of a bush on the banks of a wooded water-course, and was more or less dome-shaped and composed of bents.

The soft parts are :---Irides red or crimson; bill slatyblue or pale slate-coloured, darker at tip; legs and toes black or very dark slate-coloured.]

55. Estrilda angolensis.

Tv. Klein Letaba, July, Aug. (11); **P.** Tete, Sept. (1). [This little Waxbill was only noted from the low country of the North-Eastern Transvaal and the Inhambane and Tete districts of the Portuguese country. It was somewhat local, being found most commonly in the "bush veld" of the N.E. Transvaal, where it kept along the rivers and near the water-holes, seldom being seen in the dry waterless belts. It was observed in large flocks, which, like the other Waxbills, spent much of their time on the ground, searching for food and drinking towards the late afternoon.

The soft parts are :---Irides russet-red; bill lilac-blue, tip much darker; legs and toes pale brown.]

56. ESTRILDA GRANATINA.

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Tv. Klein Letaba, July (1).

[This striking Waxbill was only once observed, when a small flock was seen feeding on the ground near my camp in the "low veld" of the N.E. Transvaal and one specimen was shot. It appears to have much the habits of the other Waxbills.

The soft parts are :--Irides reddish; bill red; legs and toes almost black.]

57. Estrilda clarkii.

Z. Sibudeni, Nov. (2); **Tv.** Woodbush, Dec. (2); Pietersburg, Feb., Mch. (2).

Two nests, one with five and one with three eggs, taken at Pietersburg, Feb. 22nd.

The nest is somewhat retort-shaped and made of coarse grass or strips of reeds woven together; it is lined with finer material and cottony down. It was placed in the long grass of a "vlei." The eggs are pure white, oval, and without gloss. They measure 14×11 mm.

["Miyani" of Zulus.

This species was only noted from Zululand, the North-Eastern Transvaal, and the Beira district of the Portuguese country, where it occurred in flocks, often of considerable numbers, and frequented vleis and the borders of rivers and streams, even being seen feeding in the sand and mud along the water's edge.

In the N.E. Transvaal near Pietersburg it was found

breeding, several nests being placed in close proximity on the tops of some tall rushes bordering a stream. Only two of these contained eggs, the female being shot in one case.

The soft parts are :---Irides reddish; bill crimson, culmen and gonys blackish; legs and toes fleshy brown.]

58. ESTRILDA DUFRESNII.

CC. Knysna, Dec., Jan. (4); **Tv.** Woodbush, Nov., Jan. (9).

[Dufresne's Waxbill occurs in small flocks of about half a dozen, and frequents roads and clearings in the forested localities, spending much of its time on the ground and feeding principally upon grass-seeds. Like the other Waxbills, it is constantly calling when feeding, and if disturbed seldom flies far, often to the lower branches of some tree or bush, whence it quickly descends again to the ground.

The soft parts are :---Irides bright red ; bill, upper mandible black, lower red ; legs and toes blackish brown.]

59. ORTYGOSPIZA POLYZONA.

Z. Sibudeni, Oct., Nov. (4).

["Nceni" of Zulus.

This Weaver-Finch was only found in Zululand, where it occurred in small flocks on the open hill-sides and fed principally upon grass-seeds.

The soft parts are :--Irides hazel; bill dark red; legs and toes lightish brown.]

60. Spermestes fringilloides.

P. Beira, Jan. (1); Tambarara, July (1).

["Simbasili" of Ntebis.

This Weaver-Finch was only found in the Portuguese country. It occurs in small flocks in the native lands, where it feeds on grain, especially millet, and the seeds of various wild plants and grasses. It is a lively and dainty little bird, and spends the greater part of its time on the ground.

The soft parts are :- Irides hazel; bill, legs and toes dark slate-coloured.]

61. Spermestes scutatus.

N. Illovo, Nov. (1); **Tv.** Woodbush, June (1); **P.** Coguno, Aug. (1); Masambeti, Oct. (3); Beira, Nov. (5); Tambarara, Apl. (1).

[The Hooded Weaver-Finch was noted from Natal, the North-Eastern Transvaal, and the Inhambane, Beira, and Gorongoza districts of the Portuguese country. It often occurs in flocks of twenty or more individuals, and frequents both grass-covered slopes and native lands, feeding largely upon grass-seeds. On being disturbed it flies off with a sharp little alarm-note, never, however, going far and often perching on the twigs of the bushes and soon descending again to the ground.

The soft parts are:-Irides hazel; bill, upper mandible very dark slate-coloured, lower paler; legs and toes dark slate-coloured.]

62. Spermestes nigriceps.

N. Illovo, Nov. (1); **P.** Coguno, June (1); Tambarara, June (1).

[Found only in Natal and the Inhambane and Gorongoza districts of the Portuguese country. On the whole, it is a rather uncommon species and probably very local. It occurs in small flocks like *S. scutatus*, and in habits and actions resembles that species.

The soft parts are :--Irides hazel; bill slate-coloured; legs and toes black-brown.]

65. QUELEA QUELEA.

Tv. Woodbush, Dec. (9); **P.** Tambarara, Mch., May (3); Tete, Aug. (1).

The series from Woodbush is very interesting, as all the birds were collected within a few days of each other: tive are adult and presumably breeding males; of these two have crimson on the crown and chest, one has buff on the crown and crimson on the chest, and two have no crimson. Two young males are just getting traces of the black face and crimson on the crown and chest. The two females are typical.

[This Weaver-Finch was only found in the N.E. Transvaal and the Gorongoza and Tete districts of the Portuguese country. I have always seen it in flocks, often of considerable size, frequenting cultivated land in company with other Weavers, and doing no inconsiderable damage to the crops of grain, especially oats and native millet. It is a noisy bird, and after being shot at becomes wild and wary.

The soft parts are :---

Ad. Irides hazel; bill red; legs and toes fleshy.

Juv. Bill paler and duller; legs and toes horny brown.]

QUELEA ERYTHROPS.

Reichnw. Vög. Afr. iii. p. 111.

P. Beira, Dec. (11).

This species is new to South Africa. It has not been previously taken south of Mtoni in 6° 30' S. in German East Africa near Tanganyika. The type was from St. Thomas Island. The present examples match West African birds in the British Museum collection very well. I find that it has lately been recorded from Pondoland by Gunning and Haagner in their recently published 'Check-list of South African Birds' on p. 80.

[The Red-headed Weaver was only found in the Beira district, where it occurred in considerable flocks for about a fortnight, and was undoubtedly on migration. It frequented the vleis, where it fed on the seeds of the various grasses and rushes. It was continually chattering when feeding or on the wing, and was by no means wild.

The soft parts are :---

 \mathcal{J} ad. Irides hazel; bill dark horn-brown, somewhat paler at base of lower mandible; legs and toes fleshy brown.

♀ ad. Bill, upper mandible pale horn-brown, lower yellowish brown; legs and toes paler than the male.

 \mathcal{J} imm. Intermediate in colour between ad. $\mathcal{J} \& \mathcal{Q}$, and varying with advancing age.]

67 a. Pyromelana oryx sundevalli.

Tv. Woodbush, Dec., Jan. (5); Pietersburg, Feb. (2). Six nests, four with four eggs and two with three eggs, taken on February 21st, and two nests, one with four eggs and one with three eggs, taken in March, all at Pietersburg.

The wings of the males measure between 166 and 168 mm., and those of the Woodbush females about 164, thus clearly bringing these examples into the smaller and more northern subspecies.

[The Red Bishop Bird frequents more or less open country along reedy streams and rivers, and feeds largely upon grain and various seeds, doing considerable damage to crops of oats and native millet. It was found breeding plentifully at Woodbush and around Pietersburg, generally placing the nest among the upright stems of reeds over water; the full clutch apparently was four in number. At all times it is a noisy bird, continually chattering. In the breeding-season the females appear to be rather retiring in habits, and unless waited for cannot always be secured.

The soft parts are :-

3. Irides hazel; bill black; legs and toes fleshy brown.

2. Bill fleshy brown; legs and toes paler than in male.]

68. Pyromelana taha.

Tv. Pietersburg, Feb. (3); **P.** Tete, Aug. $(1 \circ)$.

[I only noticed this little Weaver near Pietersburg, where it was not uncommon and frequented the reedy streams in company with *P. oryx* and *P. capensis*. In habits it much resembles *P. capensis*, spreading the soft feathers of the rump in flight like that species.

The soft parts are :--Irides hazel; bill black; legs and toes pale brown.]

69. Pyromelana capensis.

CC. Table Mt., Feb. (1); Durban Rd., Sept. (1); Knysna, Apl. (5); Plettenberg Bay, Mch. (3).

["Kaffir-fink" of Colonists.

The Black-and-Yellow Weaver was only found in the Cape Peninsula and the Knysna district, it being replaced further east and north by *P. c. approximans*. It usually

frequents the borders of rivers and streams, although in the non-breeding-season it resorts to cultivated lands in small parties in company with other Weavers. It has a harsh cry, and the flight is swift and straight. The male in the breeding-season indulges in a gliding-downward flight with rapidly quivering wings and the rump-feathers spread out on each side.

The soft parts are :---

3, breeding. Irides hazel; bill black, greater half of lower mandible towards tip pearly; legs and toes darkish brown.

 \mathcal{S} , non-breeding, and \mathfrak{P} . Bill horn-coloured; legs and toes paler brown.]

70. Pyromelana capensis approximans.

Z. Sibudeni, Nov., Oct., Jan. (5); **Tv.** Wakkerstroom, Apl. (1).

This is the eastern form of P. capensis, and only differs in its smaller size; it extends into the Southern Transvaal, but is replaced in the Zoutpansberg district and in Rhodesia by P. xanthomelana, which can be very easily distinguished by the absence of the buff edging on the inner webs of the quills.

71. Pyromelana xanthomelana.

Tv. Woodbush, Nov., May (6) ; **P.** Beira, Nov., Jan. (5) ; Masambeti, Nov. (2).

["Maubi" of Zulus. "Kwe" of Ntebis.

The smaller Black-and-Yellow and the Black-thighed Weaver-birds were observed in Natal and Zululand, the South-Eastern and North-Eastern Transvaal, and the Beira district of Portuguese East Africa. In general habits and call they resemble *P. capensis*.

The soft parts are :--

 \mathfrak{P} & \mathfrak{F} , in non-breeding-dress. Irides hazel; bill horn-coloured; legs and toes horn-brown.

 δ , in breeding-dress. Upper mandible black, lower horny to black as the season advances; legs and toes horn-brown or dark brown.]

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72. UROBRACHYA AXILLARIS.

Z. Jususie Valley, Dec. (7 ♂, 1 ♀); Umfolosi Station, Sept. (1); Ngoye Hills, Oct. (1).

["Maubi" of Zulus.

The Red-shouldered Widow-bird was noted from Natal and Zululand, the North-Eastern Transvaal, and the Beira district of the Portuguese country. It frequents extensive vleis and low-lying plains clothed with luxuriant grass, and is usually observed in flocks comprising a male or two and numbers of females. The flight is floppy and somewhat erratic. It feeds principally upon insects and grass-seeds.

The soft parts are :--

 \mathcal{J} , in winter, and ad. \mathcal{Q} . Irides hazel; bill, legs and toes horn-brown.

3 breeding. Bill pale slate-coloured; legs and toes very dark slaty.]

74. PENTHETRIA ALBONOTATA.

Tv. Klein Letaba, Sept. $(1 \delta, 1 \circ)$.

There is no female example of this somewhat scarce species in the British Museum. The males of this group are always more conspicuous and bold, while the females are apt to hide in the long grass and are less often collected.

[This species was only found in the low country of the North-Eastern Transvaal, where it was by no means common. In general habits it resembles *C. ardens*.]

75. Coliuspasser progne.

N. Durban, Nov. (1); Z. Umfolosi Station, July (1); Tv. Wakkerstroom, Mch., Apl. (5); Pietersburg, Feb. (10).

Of the Wakkerstroom examples one is a female, one a male in full breeding-plumage, and three have already got their winter dress. The breeding male is dated March 4, the others March 25 and April 18.

Of the Pietersburg specimens, all collected in February, seven are males in breeding-plumage, one is a female, and two are young males, so that, although the nesting-season is in November or December, the males do not seem to have lost their breeding-dress by March. Mr. Grant states in his notes that he saw examples of this species near Beira, but Sheppard (Journ. S.A. Orn. Union, v. p. 24) does not include it in his list, and it is said not to occur north of the Transvaal. There are certainly no specimens of it in the British Museum, until we get as far north as British East Africa, where the longer-tailed *C. delamerei* replaces it.

["Sakka-bulla" of Zulus.

The Long-tailed Widow-bird was noted from Natal and Zululand, the South-Eastern and North-Eastern Transvaal, and the Beira district of Portuguese East Africa. It, as a rule, frequents flat and extensive vleis, where the grass is both long and rank, and is usually found in flocks comprising one or two males and numbers of females. It is somewhat wary and cannot always be approached within gunshot. The ordinary flight is floppy and erratic, and the males, when shewing off, fly with the body held almost perpendicularly, with the tail directed downward and somewhat spread, the wings being alternately opened and closed by a regular movement. In wet weather males in breedingplumage are unable to fly, and many are caught by natives and their tail-feathers extracted; these birds present a comical and shorn appearance when afterwards seen on the wing.

The soft parts are :---

 \mathcal{S} , summer. Irides hazel; bill pearly-slate-coloured; legs and toes very dark brown.

 \mathcal{Z} , winter, and \mathcal{Q} . Bill horn-coloured; legs and toes paler.]

76. Coliuspasser ardens.

Z. Sibudeni, Oct. (2); Jususie Valley, Nov., Dec. (2); **Tv.** Wakkerstroom, Mch. (1); Woodbush, Dec. (10); **P.** Tambarara, Mch., May (4).

[J, "Jojo"; 2, "Ntaga" of Zulus.

The Red-collared Widow-bird was noted from Natal and Zululand, the South-Eastern and North-Eastern Transvaal, and the Beira and Gorongoza districts of the Portuguese

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country. It frequents long grass and bushes in the vicinity of native lands, often occurring in flocks of considerable numbers, which do no inconsiderable amount of damage to crops of millet and oats. The flight is straight and rather fast, even with males in breeding-dress. I did not discover a nest. Apparently the breeding-dress is not assumed till the second summer, as a male shot in December is in full winter dress, and another shot in March was in worn plumage and had evidently passed through the breeding-season in a particoloured dress.

The soft parts are :---

3, in summer. Irides hazel; bill and legs and toes black.

 \mathcal{Z} , in winter, and ad. \mathcal{Q} . Bill, legs and toes horny brown.]

77. VIDUA PRINCIPALIS.

Z. Sibudeni, Oct., Nov. (9); **Tv.** Wakkerstroom, Mch., Apl. (4); Legogot, Apl., May (3); Woodbush, Nov., Jan. (2); Pietersburg, Feb. (1); **P.** Beira, Dec. (2); Tambarara, Apl. (2).

The males moult in March; one collected at Wakkerstroom on March 4 has only one long tail-feather left, though still keeping the body-plumage intact. Three other males from the same place, dated March 10 and 23 and April 11, shew the gradual change of the male into the winter dress, which closely resembles that of the female.

["Hlegwane" of Zulus.

The Pin-tailed Widow-bird was noted commonly in Natal and Zululand, the South-Eastern, Eastern, and North-Eastern Transvaal, and the Beira and Gorongoza districts of the Portuguese country. It usually frequents the vicinity of native lands and gardens, where it is found in small flocks of about half a dozen, comprising both sexes. The call is "zwee-zwee" quickly uttered, and the flight is slow and jerky, especially that of males in breeding-dress; the food consists principally of the seeds of various grasses and plants.

The soft parts are :--Irides hazel; bill bright red; legs and toes dark brown.]

79. VIDUA PARADISEA.

P. Tambarara, July (1).

[I have seldom observed this species, and the only localities from which I have recorded it are the Knysna district, the North-Eastern Transvaal, and the Gorongoza district of Portuguese East Africa. In habits, flight, &c. it appears to resemble *V. principalis*.

The soft parts are :--Irides hazel; bill black; legs and toes dark brown.]

81. Hypochera Nigerrima.

P. Tambarara, May (1).

[I have not seen this species elsewhere than in the Gorongoza district, and even there it was decidedly uncommon, only some two or three individuals being observed. It apparently has much the habits of the *Viduæ*, and was seen either feeding on the ground or perched on the topmost branches of a dead tree.

The soft parts are :---Irides hazel ; bill pearly white ; legs and toes fleshy white.]

83. PETRONIA SUPERCILIARIS.

Petronia petronella Stark & Sclater, Bds. S. Afr. i. p. 157. **Tv.** Klein Letaba, Aug. (2); **P.** Coguno, Aug. (1); Masambeti, Oct., Nov. (3).

The example from Coguno in the Inhambane district differs from the other quite typical specimens in its much clearer white eyebrow, its paler under surface, and most markedly by its chin and throat being quite clearly washed with yellow, apart from the yellow throat-spot. There is only one bird in the British Museum collection which approaches this. It was collected by Buckley in Swaziland (24th July, 1876). I am inclined to regard these two specimens as belonging to a coastal form worthy of subspecific distinction from the typical species, but should like to examine further material. Its measurements are : wing 90 mm., tail 57, tarsus 12, culmen 11.

[This Sparrow was found in the low country of the

North-Eastern Transvaal and the Inhambane, Beira, Gorongoza, and Tete districts of Portuguese East Africa.

I consider it a misnomer to call this a Rock-Sparrow, as its habits exactly resemble those of the other members of the Sparrow tribe, and all that I have seen have been solitary or in pairs frequenting more or less timbered country and feeding on grain, seeds, the green shoots of trees and shrubs, &c., while often visiting native lands for this purpose. The call is very similar to that of P. melanurus, and only after long acquaintance with the species can a difference be detected.

The soft parts are :--Irides hazel ; bill, upper mandible dark horn-brown, lower much paler ; legs and toes slatecoloured.]

84. PASSER MELANURUS.

CC. Durban Rd., Mch., Sept. (5); Tv. Wakkerstroom, Apl. (2).

84 a. PASSER MELANURUS DAMARENSIS.

CC. Klipfontein, Apl., May, July (10); Port Nolloth, Aug. (2).

The Damaraland Sparrow is separated by Reichenow from the Cape form by the "purer black of the crown, while in the typical form the black is clearly intermixed with brown." I find in the Klipfontein males that the head is darkest in April, while later the feathers become worn and bleached, and the July birds are much paler on the head and back than those of April. I am unable to distinguish these from Damaraland birds in the British Museum or from Cape and Transvaal birds. The Namaqualand females, however, are distinctly paler and may perhaps justify the retaining of this subspecies. Grant has come to very similar conclusions.

[This Sparrow seems very variable in the colour of the upper surface at the same time of year, especially among the females; this is probably due to age, the darker birds being fully adult.

There are two moulting females killed in March and April which are assuming a dark head and mantle, so that the conclusion come to by Dr. Sharpe in 'The Ibis' for 1904

(p. 352), that this dark plumage is probably the breedingplumage, does not seem to be the case. It must therefore be due to age.

The series of females from Namaqualand, when compared with Cape, Deelfontein, and Eastern specimens, are much paler and more sandy on the upper surface and are perhaps slightly smaller. The males, however, intergrade with Cape and Deelfontein specimens. A series of females in breedingdress are required to shew whether or not this is a pale Western race.

The Cape Sparrow was noted from Namaqualand, the Cape Peninsula, the South-Eastern Transvaal, Pretoria, and Upper Natal, but does not exist in Zululand, the coast districts of Natal, the Eastern and North-Eastern Transvaal, or Portuguese East Africa. It frequents towns and human habitations, and is found both in pairs and flocks. In call, actions, and general habits it resembles the European Sparrow.

The soft parts are :---Irides dark hazel; bill dark horny black; legs and toes dark blackish brown.]

86. PASSER GRISEUS.

Tv. Pietersburg, Feb., Mch. (3); Turfloop, Mch. (3); P. Tete, Sept. (1).

[This Sparrow was only observed in the localities where specimens were taken. In the North-Eastern Transvaal it was fairly plentiful, and frequented gardens and orchards. It was scarce in the Tete district, only a few being observed in the native lands around my Mazoe camp. In call and habits it resembles the other Sparrows.

The soft parts are :---Irides hazel; bill black; legs and toes brown. In the winter season the bill appears to be paler horn-coloured.]

87. POLIOSPIZA GULARIS.

CC. Knysna, Apl. (1); **Tv.** Legogot, Apl. (2); Woodbush, Nov., Jan. (3).

[Specimens from East and North-East Transvaal are not so much spotted on the throat as Southern examples. This Seed-eater was found in the Knysna and the South-Eastern, Eastern, and North-Eastern Transvaal. It usually occurs in flocks and frequents cultivated and old lands, feeding largely on various seeds and grain, especially millet. In habit and call it resembles birds of the genus *Serinus*.

The soft parts are :--Irides hazel; bill, upper mandible dark horn-brown, lower fleshy; legs and toes brown.]

POLIOSPIZA MENNELLI.

Poliospiza mennelli E. C. Chubb, Bull. B. O. C. xxi. 1908, p. 62.

P. Coguno, Aug. (1).

This species was recently described from the Shangani River in Rhodesia. A Seed-eater from Coguno in the Inhambane district is a very good match to the type in the British Museum, and extends the distribution of the species considerably. It is most probable that the oldest name is *P. melanochroa* Rchw., described from Ukinga in German East Africa, to which Neave has recently referred examples taken by him in N.E. Rhodesia; of this I have not seen the type. Reichenow, however, does not mention the conspicuously dark ear-coverts, and states that the tail measures 70 mm. against 51 for *P. mennelli*.

[Mennell's Seed-eater was only found in the Inhambane district, where the male sent was shot feeding in a native garden among numbers of Waxbills.

The soft parts are :---Irides hazel; bill fleshy; legs and toes pale brown.]

88. SERINUS CANICOLLIS.

Z. Sibudeni, Oct., Dec. (11); **Tv.** Wakkerstroom, Mch. (6); Woodbush, Nov., Dec. (3).

The young birds killed at Wakkerstroom are very different from the adults, and I have not found any adequate account of their plumage, nor are there any examples like them in the British Museum collections.

The following is a short description :--Above dull olivebrown, streaked more finely on the head and rump, more strongly on the back, with dusky; wings and tail very

much as in the adult; below dull olive, heavily streaked except on the centre of the abdomen and under tail-coverts.

It most nearly resembles the female of S. *flaviventris*, but differs in its plain and not yellow rump, and very yellow tail.

[" Umzingili " of Zulus. " Kaap-Canarie " of Colonists.

The Cape Canary was noted from the Cape Peninsula (where, however, it was not plentiful), Zululand, and the South-Eastern and North-Eastern Transvaal. At Wakkerstroom in S.E. Transvaal several large flocks, apparently of young birds only, were observed during March; six of these were obtained and are birds in first plumage, just beginning to assume the adult feathering. This Canary is usually observed in pairs, except after the young are fledged. It frequents the edges of woods and forests, plantations, and gardens. The males have a sweet and prolonged song, and the usual call-note is a mellow "sweet."

The soft parts are :--Irides hazel; bill pale horn-coloured; legs and toes darkish brown.]

89. SERINUS SULPHURATUS.

CC. Knysna, Feb. (1); Z. Umfolosi Station, Aug., Sept. (5).

The brown streaks on the back vary a good deal in development; doubtless, as the plumage wears, they become more marked.

["Nqabe" of Zulus.

This large Canary was only found in the Knysna district and Zululand. In the Knysna it frequents the more open parts of the forest regions. In Zululand it was only noted in the thorn- and euphorbia-covered flats around the Umfolosi Station. I have always seen it singly, and the males were often observed sitting on the tops of trees, giving vent to a loud and prolonged song. At other times they were seen feeding on the seeds of grass and wild plants.

The soft parts are :---Irides hazel ; bill, upper mandible pale horn-brown, lower yellowish horn-coloured ; legs and toes horn-brown.]

90. SERINUS FLAVIVENTRIS.

CC. Klipfontein, Apl., May, June (5); Port Nolloth, July (1); Durban Road, Mch., Sept. (3).

One nest with three eggs taken at Durban Road, Sept. 22nd.

[This Canary was only noted from Namaqualand and the Cape Peninsula. In the former locality it was in small flocks, as it was the winter season, but in the latter locality it was breeding and occurred in pairs.

I found the nest on Sept. 22nd at the Cape; this was composed of twigs of a wild sage and lined with the down of a cotton-plant. It was placed some two feet from the ground in the middle of a bush. It contained three eggs, which were apparently the full clutch, and both the old birds were secured. In habits and call this Canary much resembles *S. canicollis*; and it has a sweet and prolonged song, in many ways equal to that of the Cape Canary.

The soft parts are :---Irides hazel ; bill, upper mandible pale horn-brown, lower much paler and often yellowish ; legs and toes darkish to dark brown.]

93. SERINUS ICTERUS.

Z. Jususie Valley, Dec. (4); Umfolosi Station, July (2); Hluhluwe Stream, Aug. (1); Ngoye Hills, Oct. (2); **Tv.** Legogot, May (1); Klein Letaba, Aug., Sept. (3); **P.** Tambarara, Apl., May, June, July (4).

["Umtuquani" of Zulus.

This little Canary was noted from Zululand, the Eastern and North-Eastern Transvaal, and the Gorongoza district of the Portuguese country. It appears to be confined, more or less, to the lower "bush veld," and was nowhere observed in the "high veld" proper. It is found in small flocks in the winter season and in pairs during the summer, but I have not succeeded in taking the eggs. It frequents, to a great extent, old and cultivated land and gardens, feeding principally upon grass-seeds and dry fruit, especially the "Num-num," the juice of which often stains the plumage of the throat and breast (vide § 26 Sept. '05, Klein Letaba). The call is the usual Canary note, and the males besides have a rather sweet song of a few notes.

The soft parts are:—Irides hazel; bill dusky horncoloured, lower mandible somewhat paler; legs and toes dusky brown, slightly paler in the female.]

94. SERINUS ALBIGULARIS.

CC. Klipfontein, Apl. (2); Port Nolloth, Aug. (2).

[Since the Central Cape Colony trip I have only found this Seed-eater in Namaqualand, where it was fairly plentiful. It was observed singly or in pairs, and frequented gardens and veld near water. It feeds largely upon various seeds and grains.

The soft parts are :- Irides hazel; bill, upper mandible palish horn-coloured, lower fleshy; legs and toes blackish.]

97. SERINUS SCOTOPS.

CC. Knysna, Dec., Feb. (5); **Z.** Sibudeni, Nov., Jan. (2); **Tv.** Zuurbron, Apl., May (10); Woodbush, Nov., Dec. (3).

["Umbalane" of Zulus.

This Canary was found in the Knysna, Zululand, and the South-Eastern and North-Eastern Transvaal. It is a woodland-haunting species, and is usually found in pairs in clearings and along roads. It appears to feed largely on the berries and small wild fruit that abound in most forest districts.

This is a pretty and lively species, and the males have a more or less sweet song, the usual call-note being very similar to that of the other South-African Canaries.

The soft parts are :--Irides hazel; bill, upper mandible pale horn-brown, lower fleshy horn-coloured; legs and toes fleshy brown.]

92. Anomalospiza imberbis.

Tv. Woodbush, Jan. (1).

This bird should, in my opinion, be placed among the Ploceidæ, as suggested by Shelley. There is no example of it in the British Museum. The types of *Serinus rendalli* from Barberton are in the Liverpool Museum, and I know of no other South-African examples being taken since (cf. Ann. S. Afr. Mus. iii. 1905, p. 372).

[A single specimen only of this curious species was obtained; this was shot in a reedy river among great numbers of *Hyphantornis* and *Pyromelana* that were breeding there. Its very bright colour and small size at once distinguished it, but I was not able to pick out another example. In habits it apparently resembles the Yellow Weavers.

The soft parts are :--Irides hazel; bill blackish slatecoloured, paler horny on the under side of the lower mandible; legs and toes pale brown.]

99. Alario Alario.

CC. Klipfontein, May (1).

[This species was only found in Namaqualand, where it was in company with *A. leucolæma*, but was apparently much the scarcer bird, as the example sent was the only one shot. In call and habits it resembles the other form.

The soft parts are :--Irides dark hazel; bill horn-brown; legs and toes blackish.]

Alario leucolæma.

CC. Klipfontein, Apl., May (8).

The white-throated and white-eyebrowed form of the Mountain Canary was supposed to be the winter dress of the typical form until Sharpe (Bull. B. O. C. xiii. p. 80) described it as a distinct species under this name.

It appears to replace *A. alario* to the west and north-west. There are examples of *A. alario* in the British Museum from Deelfontein, and one from Table Mountain, and also one labelled "Zambesi, Meller," of doubtful authenticity.

Alario leucolæma, on the other hand, appears to be found chiefly in German S.W. Africa. There are examples in the British Museum from Damaraland, the Hountop River, Gt. Namaqualand (type), and from Ookiep in Little Namaqualand.

There are three females among those collected by Grant; these are quite distinguishable from the same sex of *A. alario*. They are paler, have a more or less distinct white

eyebrow, white lores, a white spot in the ear-coverts, and a white throat slightly spotted with brown; while the female of *A. alario* has no white on the head, throat, or ear-coverts, all of which are dusky brown.

I think, therefore, there can be no question of the distinctness of the two species, though *A. alario* extends as far west as Klipfontein and *A. leucolæma* as far east as Deelfontein.

[This bird was fairly plentiful in Namaqualand. It was found in flocks and frequented homesteads and cultivated lands, feeding largely on the fallen grain, or at other times on various seeds. The males often indulge in a sweet little song and when feeding are continually calling.

The soft parts are :--Irides dark hazel; bill horn-brown; legs and toes brown.]

101. EMBERIZA FLAVIVENTRIS.

Tv. Klein Letaba, July, Aug., Sept. (8); Woodbush, Jan., May (3); Legogot, Apl. (1); P. Coguno, Aug. (2).

[This Bunting was only noted from the East and North-Eastern Transvaal and the Inhambane district of Portuguese East Africa. I have always observed it singly or in pairs. It spends the greater part of its time on the ground searching for and feeding on various seeds; when disturbed it perches on a bush or low bough of a tree, and is usually tame and easily shot. Its call is "sissi-sissi see," but is not often heard. The flight is quick and jerky, but never sustained.

The soft parts are :---Irides hazel; bill, upper mandible dark horn-brown, lower fleshy; legs and toes fleshy-brown.]

102. Emberiza major.

P. Tambarara, Mch., Apl. (3).

Shelley does not recognise E. orientalis as distinct from E. major, and this widely spread tropical Bunting should be known under the latter and older name. It is a rare bird in South Africa, and there is only one example thence in the British Museum—a skin collected on the Hunyani River in Mashonaland by G. A. K. Marshall.

Grant's examples are all young birds. One of these has the breast narrowly streaked with brown.

[Only some half a dozen individuals of this Bunting were seen, and all were immature. They frequented the lower end of a large patch of cultivated land bordering a stream, and were feeding on millet and rice that had been planted there by the natives. In actions and habit this species resembles *E. flaviventris.*]

103. FRINGILLARIA CAPENSIS.

CC. Durban Road, Mch. (3); Klipfontein, Apl., July (5).

The Durban Road skins are slightly paler than those from Klipfontein, while the latter are distinctly paler than those from Deelfontein, which were described by Sharpe as a new species (F. media); the Buntings of Natal and the Transvaal are still more differentiated, and form a third subspecies. There are examples in the British Museum from the following localites :—

F. capensis typica: Capetown and suburbs, Durban Road, and Tjobis (Namaqualand); slightly darker are those from the Paarl (Shelley), Mossel Bay (Oates), and Klipfontein.

F. capensis media Sharpe: Deelfontein, De Aar, and Potchefstroom.

F. capensis reidi Shelley : Ingagane River and Newcastle (Natal), and Rustenburg (Transvaal).

[The Cape Bunting is found in pairs, and, as a rule, on ground strewn with boulders and rocks. On the tops of these it perches and underneath them it breeds. It is a tame and confiding species and is often seen near habitations. The flight is low, but not sustained, and the call is a single note.

The soft parts are :--Irides hazel; bill slate-coloured; legs and toes dark horn-coloured.]

104. FRINGILLARIA TAHAPISI.

Tv. Klein Letaba, July, Aug. (5); Woodbush, Nov., Jan. (2).

[The North-Eastern Transvaal is the only locality in which I have found this Bunting.

Unlike the other South African members of the genus, it usually perches on trees and bushes, and is not necessarily found in rocky situations. At the Klein Letaba it was commonly seen in the late afternoon drinking at the river in company with Finches and Sparrows, flying up to the trees after quenching its thirst, and cleaning and preening its feathers in the last rays of the sun. The call is very similar to that of F. capensis.

The soft parts are :---Irides rich hazel ; bill, upper mandible dark horn-coloured, lower yellow; legs and toes yellowish horn-coloured.]

105. FRINGILLARIA IMPETUANI.

CC. Port Nolloth, Sept. (2).

[After the Central Cape Colony trip this little Rock-Bunting was only found in Namaqualand, where it was not plentiful, and in the North-Eastern Transvaal, where a pair were observed on a rock-strewn hill-side near Woodbush village, in June 1905. Like F. capensis it frequents rocky localities, and I have never seen it perch on trees or bushes.

The soft parts are :-- Irides hazel; bill slaty; legs and toes fleshy.]

107. EREMOPTERYX VERTICALIS.

CC. Klipfontein, June, July (3).

[This little Lark was only found in Namaqualand, where it was by no means plentiful; it was observed in small flocks in sandy country. When disturbed the whole flock rises, most of them uttering a short note, but never going far. It is a sociable and tame little bird, being often seen within a few yards of outbuildings.

The soft parts are :-- Irides brown or grey-brown; bill pearly white; legs and toes fleshy white.]

108. EREMOPTERYX SMITHI.

Tv. Pietersburg, Feb., Mch. (11); P. Tete, Aug. (3).

[Smith's Lark was first noted in the North-Eastern Transvaal, where numbers made their appearance (Feb. 23) during the latter half of the rainy season on the open sandy country around Pietersburg. It was not again seen till Tete was reached, where numbers were observed in August on the sandy rock-strewn country bordering the Zambesi River near that town. In actions, call, and habits this Lark resembles the other members of the group.

The soft parts are :--Irides bright hazel; bill pearly or bluish white; legs and toes purplish.]

112. CALENDULA CRASSIROSTRIS.

CC. Durban Road, Mch. (3); Klipfontein, Apl., May, June, July (10); Port Nolloth, Aug. (3).

Mr. Grant thought that he could distinguish a Cape race from that of Namaqualand and even of Deelfontein, but the Cape examples from Durban Road were all taken in March, and had hardly finished their moult, so that the wings and tails appear unusually short.

My measurements seem to shew that the culmen of both the Namaqualand and Cape birds averages larger than in those from Deelfontein, but hardly sufficiently so for distinguishing two races.

[This Lark was found at the Cape Peninsula and in Namaqualand. It frequents singly or in pairs more or less open sandy localities or cultivated lands, and spends most of its time on the ground in search of grain and various seeds.

The soft parts are:-Irides hazel; bill, upper mandible and tip of lower dark blackish horn-coloured, base of lower whitish horn-coloured; legs and toes pale slate-coloured.]

HETERONYX RUDDI. (Text-figure 9.)

C. Grant, Bull. Brit. Orn. Club, xxi. p. 111 (July 11, 1908).

Tv. Wakkerstroom, Feb. (1).

A single example of this curious Lark was obtained in the South-Eastern Transvaal, and was described as the type of a new genus by Grant.

It resembles *Mirafra* in every respect—in the form of the beak, the exposed nostrils, the shape of the wing, and the ength of the outer primary, but can be at once recognised

by the long hind toe and claw, measuring in the single example 12 + 19 = 31 mm. in all. In *M. cheniana*, a bird of about the same size, the hind toe and claw measure 7+7=14 mm.

The following is a further description of this interesting bird:—Above dusky, most of the feathers edged with pale tawny; a narrow band of pale tawny down the centre of the crown, and a good deal of rufous tawny across the neck; primaries edged with pale rufous, and with a paler rufous edging along the webs on the lower surface; tail just moulted, but apparently with the light pattern of the outer feather



Foot of Heteronyx ruddi, to shew the long hind toe and claw.

white; below tawny whitish, quite white on the throat, and with dusky streaks on the breast; lores and ear-coverts as beneath; under wing-coverts very pale tawny, almost white. Hind claw quite straight for the first three-quarters of its length, beyond which it is slightly downcurved.

[Rudd's Long-clawed Lark was found in the open grasscountry around Wakkerstroom; the specimen sent, the only one observed, was shot running on the ground.

Irides deep brown; bill, upper mandible pale horn-brown, lower yellow-horn-coloured; legs and toes fleshy.]

119. MIRAFRA AFRICANA.

Z. Umfolosi Station, July, Aug., Sept. (5); P. Coguno, Sept. (3).

[This remarkable Lark was only found in the low country of Zululand and again in the Inhambane district of the SER. IX.—VOL. V. T Portuguese country. It frequents more or less open localities, sparsely bushed, or native clearings, and in the early mornings can be seen perched on the top of some bush or low tree, uttering at intervals a loud and somewhat prolonged whistle; during the rest of the day it is silent and spends its time on the ground resting or searching for food.

It was, apparently, not breeding in either locality at the time of my visits.

The soft parts are :--Irides deep brown; bill, upper mandible dark horn-coloured, lower fleshy; legs and tocs darkish brown.]

MIRAFRA AFRICANA TRANSVAALENSIS.

Hartert, Nov. Zool. vii. 1900, p. 45 [type from Rustenburg].

Tv. Woodbush, Jan., Feb. (3); Pietersburg, Mch. (1); Turfloop, Mch. (1).

[I can appreciate this race of Hartert's, which, besides the more rufous coloration, has the bill decidedly smaller, averaging 11 against 18 mm. in the typical form.

This geographical race was only found in the North-Eastern Transvaal, on the thorn-covered hill-sides.

In habits, call, &c. it exactly resembles M. africana.]

121. MIRAFRA CHENIANA.

Tv. Pietersburg, Feb., Mch. (5).

[This Lark was found only on the flat open grass veld near Witkop Hill, close to Pietersburg.

There some numbers were seen, always singly; and the striking habit of the bird, soaring and singing in the morning and late afternoon, much after the manner of A. arvensis, at once drew my attention to it. During the heat of the day it is found among the longish grass, and can also be seen feeding on open sandy spots. The food, apparently, is principally of grass-seeds.

As only males were secured, the bird must have been breeding, but no females could be flushed.

The soft parts are :--Irides bright brown; bill, upper mandible horn-brown, cutting-edge of upper and lower mandibles pale yellowish horn-coloured; legs and toes fleshy brown.]

MIRAFRA RUFOCINNAMOMEA.

Shelley, Bds. Afr. iii. 1902, p. 45.

Tv. Klein Letaba, Sept. (1).

A Lark taken in the North-East Transvaal seems undoubtedly referable to this species, which is new to South Africa. It has hitherto been known from Ugogo in German East Africa, and north to Abyssinia, whence came the type described by Salvadori. There is only one example in the British Museum—the type of *M. torrida* Shelley, obtained by Sir John Kirk in Ugogo. The Transvaal example matches it very well.

[One specimen of this species was taken in the low country of the North-Eastern Transvaal, where it was distinctly uncommon. It was shot running on the ground in an open grassy flat.

The soft parts are :--Irides hazel; bill very dark horncoloured, lower mandible slaty; legs and toes slaty.]

MIRAFRA ZOMBÆ.

Ogilvie-Grant, Bull. B. O. C. xiii. 1902, p. 27; Claude Grant, Bull. B. O. C. xxi. 1908, p. 111.

P. Masambeti, Nov. (1).

This species, new to South Africa, and before noted from the low country in Nyasaland—Zomba, Lake Shirwa, and Milanji slopes, had been previously confused with *M. fischeri*, from which it differs in having the upper parts dusky, streaked with darker and without transverse pattern.

[A single specimen, the only one seen of this Nyasaland species, was shot on an open grassy flat, bordering some cultivated land, where the Masambeti stream disappears into the veld.

The soft parts are:—Irides hazel; bill dark horn-coloured, lower mandible yellowish; legs and toes livid.]

123. MIRAFRA APIATA.

CC. Plettenberg Bay, Feb., Mch. (4); Klipfontein, July (1).

["Monad-vogel" of Colonists.

The male in somewhat worn plumage, shot on the 19th of July in Namaqualand, has considerably more rufous on each side of the crown and on the nape than normal specimens.

This Lark was only observed in Namaqualand and the Knysna district, where it frequents open country dotted with scrub or scattered bushes. It is well known from its peculiar habit of springing into the air with a loud clapping of the wings, and giving vent to a prolonged whistling "whew" as it descends.

Also in the early morning, usually from the first streak of dawn to just after sunrise, its call of "Vroeg in de morrow, vroeg in de morrow, daglicht, daglicht, daglicht" (Early in the morning, early in the morning, daylight, daylight, daylight) can be heard. This call is sometimes, but not usually, heard at sundown.

The soft parts are:--Irides hazel; bill dark horn-coloured, lower mandible much paler; legs and toes flesh-brown.]

132. MIRAFRA NIVOSA.

Alæmon nivosa Stark & Sclater, Bds. S. Afr. i. p. 230.

CC. Durban Rd., Mch. (1); Klipfontein, Apl., May, June, July (15); Anemous, Apl. (2); Port Nolloth, Mch., Aug. (3).

[The Karroo Lark was only found at the Cape Peninsula, where it was scarce, and in Namaqualand, where it was very plentiful. It frequents open flats and the tops of mountainranges, and is usually in pairs. The call is a whistle, and, like *Certhilauda capensis*, the bird is fond of perching on the tops of low bushes and scrub, especially if disturbed.

The soft parts are:-Irides hazel; bill slate-coloured, pinkish at base of lower mandible; legs and toes pinkish slate-coloured.]

125. Spizocorys controstris.

Tv. Pietersburg, Feb., Mch. (4).

[This Lark was only found in the open grass-country near Pietersburg, where a few small flocks were observed. It frequents sandy patches where the herbage is shortest, and

feeds largely on the seeds of grass. When flushed it utters a sharp little call, but seldom flies far.

The soft parts are:-Irides hazel; bill, legs and toes fleshy horn-coloured.]

126. TEPHROCORYS CINEREA.

CC. Durban Rd., Mch. (3); Klipfontein, Apl., May, June, July, Aug. (15); Port Nolloth, Aug. (4).

An examination of the series of Red-capped Larks in the British Museum, together with those contained in the present collection, leads me to the conclusion that we must distinguish two geographical races, a western paler and a more rufous and darker eastern and northern race. In the latter the rufous patches on the sides of the chest and crown are more extensive and of a richer shade, and often, though not always, extend to the flanks, while the general coloration is distinctly darker.

Additional examples in the British Museum, which may be fairly referred to the typical paler race, are from Deelfontein (*Grant and Seimund*), Little Namaqualand, and Cape Town.

128. TEPHROCORYS CINEREA ANDERSSONI.

Tv. Pietersburg, Mch. (1).

Of the darker race referred to above there is only one example in the Grant collection; it matches almost exactly *T. anderssoni*, a cotype of which from Otjimbinque is in the British Museum.

There are other Larks in the collection from Colesberg, Elands Post, and "British Kaffraria" in C.C., from Kumma in Bechuanaland, from the Orange Free State, Potchefstroom, and Natal, as well as Angoniland and British East Africa, which, I think, may be referred to this subspecies.

[The Red-headed Lark was observed in Namaqualand, the Cape Peninsula, and the South-Eastern and North-Eastern Transvaal. I have only noticed it in flocks, often of considerable numbers; it usually frequents open and more or less sandy country, where it feeds largely upon seeds, frequently visiting native lands for the fallen grain after harvesting. It is a dainty and lively little Lark, running with speed and having a strong though seldom long-sustained flight. When feeding the birds continually call to each other, and also when disturbed.

The soft parts are :--Irides hazel; bill pale brown, in specimens shot in July and August the bill is more or less slaty; legs and toes slaty.]

130. HETEROCORYS BREVIUNGUIS.

Tv. Turfloop, Mch. (1).

One example of this rare bird was brought back. There are only three examples in the British Museum—two without locality from Sir A. Smith's collection, and one labelled "Ort fr. Inkoluba," taken by Wahlberg, 16/Apl./44. According to Sundevall's description, the type locality is the region of the Limpopo River (Aprevier), probably the present Aapies River on which Pretoria is situated, and the Inkoluba River, which is probably also one of the head tributaries of the Limpopo.

[The Short-clawed Lark was only found in the strip of thorn-covered country along the main "Zand River" on the Pietersburg-Woodbush road. There several examples were seen, but were so wild that after much time spent in endeavouring to get within shot only one was taken. It runs with celerity and often perches on the tops of the bushes and stunted trees, uttering a clear whistling call-note. Apart from size and colour, in general habits it much reminded me of *C. semitorquata*.

The soft parts are :--Irides hazel; bill grey-brown, base of lower mandible slaty; legs and toes bluish white.]

131. CERTHILAUDA SEMITORQUATA.

Tv. Wakkerstroom, Mch., Apl. (5).

[This large Lark was only found in the Wakkerstroom district, where it frequents the open and more or less stony country near the town. It is always in pairs, and in habits, call and flight greatly resembles *C. capensis*.

The soft parts are :--Irides light brown ; bill brownish horn-coloured, bluish at base of lower mandible; legs and toes slaty brown.]

133. CERTHILAUDA CAPENSIS.

CC. Port Nolloth, Mch., July, Aug. (14).

The bill of the male averages 30.5 mm., ranging from 28 to 33 in eleven examples; that of the female is much smaller, 24-25 in three examples.

[This Lark was only found in Namaqualand, where it inhabits the "sand veld," which extends inland some ten miles from the coast. It is generally observed in pairs, and attracts attention by sitting on the tops of bushes and uttering at intervals a clear whistle-call. It runs with great celerity; the flight is strong and straight, but is seldom sustained for more than a few yards. It was not breeding at the time I was in the locality.

The soft parts are :--Irides dark hazel; bill dark hornbrown; legs and toes bluish horn-coloured.]

134. CERTHILAUDA ALBOFASCIATA.

CC. Anemous, Apl. (3); Klipfontein, Apl., July (4); Tv. Pietersburg, Feb. (2).

The Namaqualand specimens are not in any way paler than the normal Cape examples, and have no resemblance to Reichenow's *C. albofasciata arenaria* from Great Namaqualand. In fact, their lower sides are of a slightly darker and more chestnut shade of brown than those from the rest of the Colony ; they are further distinguished by an almost complete absence of the dusky breast-streaks. These characters, however, seem hardly sufficiently constant to warrant the formation of a new race.

[This Lark was found only in Namaqualand, where it was common, and again in the North-Eastern Transvaal, where the single pair taken were observed on the flat open veld near Pietersburg.

This bird is found in pairs or sometimes in threes, and frequents sandy localities sparsely covered with vegetation. It runs with celerity and will often, when under cover of a bush or rise in the ground, squat and endeavour to evade pursuit, but if approached will instantly start running away, and, finally, if closely pursued, take to the wing. The flight is slow and somewhat undulating, but seldom long sustained, the white tips to the tail-feathers being very conspicuous. The call is a clear whistle, but not so loud as that of *C. capensis*; and like that species the bird will often call from the top of a low bush or clump of heather.

The soft parts are :---Irides greyish hazel; bill, upper mandible dusky horn-coloured, lower more or less livid; legs and toes whitish brown.]

135. MACRONYX CAPENSIS.

CC. Knysna, Apl. (2) ; Plettenberg Bay, Feb., Mch. (5). ["Kalkoenje" of Colonists.

The Cape Long-Claw was only found in the Knysna; its place was taken in all the Eastern and Northern localities visited by the following species. It inhabits open grassy hill-sides, and is found both singly and in pairs. It is a great runner, and is fond of perching on the tops of ant-heaps and clods of earth. When flushed it rises with rapid beats of the wings and flies fairly straight, seldom, however, going far, and descending abruptly and sharply to the ground. The call, which is usually uttered when flying, and also when just rising, is a series of loud mewing whistles which might be described as "Ziu," "Ziu."

I have found several nests, which always contained newly hatched young. They are cup-shaped, composed of grass, and placed on the ground under the shelter of an ant-heap or large tuft of grass.

When breeding the adults are particularly tame, approaching within a few yards of the intruder. The food is principally of insects, varied with grass and other seeds.

The soft parts are :---Irides hazel; bill, upper mandible dark horn-brown, lower dark slate-coloured; legs and toes palish horn-coloured.]

MACRONYX CAPENSIS COLLETTI.

Schou, Ornith. Monatsber. xvi. 1908, p. 119 (Zululand).

Z. Sibudeni, Oct., Nov., Dec. (11); Umfolosi Station, July (3); Tv. Wakkerstroom, Mch., Apl. (5); Zuurbron, May (1); Woodbush, Nov. (5); Turfloop, Mch. (2).

The Orange-throated Long-Claws of Natal, Zululand,

and the Transvaal form a well-marked race, and have been recently separated as *M. colletti* by Schou.

In this subspecies the yellow of the lower surface is much more extensive than in the typical form, reaching up to the black necklace; the yellow supercilium is also better marked and more extensive, and there is a yellowish tinge on the lower ear-coverts and below the eye.

In addition to the localities already mentioned, there are examples of this subspecies in the British Museum from Pinetown, Maritzburg, and Newcastle in Natal, Kroonstad in the Orange River Colony, Potchefstroom in the Transvaal, and the Makalaka country.

To the typical race belong examples from Cape Town, Elands Post, and King William's Town.

["Noomfi" of Zulus.

Collett's Long-Claw was found both on the high and low veld of Zululand, the highlands of the Wakkerstroom district, the open country around Pietersburg, and the open grassy tops of the Woodbush Hills. This species, like *M. capensis*, usually frequents open country, and, where found, is very plentiful. In call and habits it resembles *M. capensis*, and it can only be considered a geographical form of it. It breeds in the summer season (Oct.-Feb.). I have seen nests in Zululand and N.E. Transvaal, unfortunately always containing newly hatched young. The site of the nest is like that of *M. capensis*.

The soft parts are similar in the two forms. In the young all the soft parts are much paler.]

136. MACRONYX CROCEUS.

Z. Jususie Valley, Dec. (1); Umfolosi Station, June, July, Aug., Sept. (7); Ngoye, Sept. (1); Tv. Legogot, May (4); P. Coguno, June (1); Masambeti, Nov. (2); Beira (3).

One nest with three eggs, taken at Masambeti, Nov. 9th. ["Nqomfi" of Zulus.

The Yellow-throated Long-Claw was noted from Zululand, the Eastern Transvaal, and the Inhambane and Beira districts of Portuguese East Africa. As a rule, this species inhabits somewhat lower elevations than does *M. capensis*, and is partial to country that is more or less bushed; it is often found at the edges of and in the native lands. In flight and call it resembles *M. capensis*. It breeds in the summer season, and I have seen nests in Zululand, all of which, however, were plundered by Crows before the full clutch of eggs had been laid.

A nest taken near Beira on the 9th of November, 1906, was composed of dry grass and lined with fine rootlets; it was placed in a slight hollow at the foot of a small ant-heap among some rough grass. It contained three eggs, which were the full clutch, and the two old birds were shot. The curious thing about this nest was that the old birds built the nest about the third week in October and then deserted it, disappearing entirely from the locality, so that when I examined the nest about the end of the month it was wet and sodden and no birds were to be seen.

On the 9th of November following, happening to be passing over that piece of ground, I, out of pure curiosity, walked over to look at the place, and to my astonishment the female flew off the nest. Except perhaps for the very wet weather, I am unable to explain why the nest was deserted for so long, and then finally taken possession of.

The soft parts are :--Irides hazel; bill, upper mandible dark horn-brown, lower slaty; legs and toes darkish brown.]

137. MACRONYX AMELIÆ.

Z. Umfolosi Station, June, July, Aug. (5).

["Ncongia" of Zulus.

This pretty Long-Claw was only found in the flats around Umfolosi Station, Zululand, where it was not plentiful and frequented the dry vleis filled with longish grass. It appeared singly, and had to be shot on the wing, as it was impossible to see it in the grass. The flight is low and fairly straight, and the call is like that of the other Long-Claws, but clearer and sharper.

The soft parts are :---Irides hazel; bill, upper mandible horn-brown, lower pale horn-coloured; legs and toes palish horn-coloured.]

138. ANTHUS CHLORIS.

Tv. Wakkerstroom, Mch. (4).

One specimen, dated March 16, is in full breeding-dress; of the others, two are young birds with the tails only just sprouting, while the fourth, dated March 2, is probably a freshly moulted bird.

[This Pipit was only found in the South-Eastern Transvaal, where it was not uncommon on the open grassy hill-sides and flats. It is rather a skulker, running with considerable celerity and, except when hard pressed, not taking to the wing. The flight is very similar to that of the European Meadow-Pipit (A. pratensis). It apparently breeds in the summer season, as young birds, both fully and half fledged, were taken in March.

The soft parts are :---Irides hazel; bill, legs and toes horn-brown. In the young the bill, legs and toes are much paler.]

139. ANTHUS LINEIVENTRIS.

Tv. Woodbush, May, June (2).

A rare species in South Africa.

[The two birds sent are the only examples I have ever seen of this Pipit. They were shot among some rocks on a recently burnt hill-side. They were tame, and when disturbed merely ran off from one rock to another, and uttered no call. In appearance and actions this bird greatly resembles *A. crenatus*.

The soft parts are :---Irides hazel; bill, upper mandible horn-brown, lower pale horn-coloured; legs and toes amberyellow.]

140. ANTHUS CRENATUS.

Tv. Wakkerstroom, Mch. (2).

Also a rare species, hitherto supposed to be confined to Cape Colony. It has been recorded from the Cape Division, Deelfontein, Burghersdorp, and Colesberg, but the present examples extend its range considerably further to the northeast.

[The pair secured are the only examples I have seen since

the Central Cape Colony trip. These were shot on some rocky ground on an open grassy hill-side. They were somewhat tame, and when disturbed merely ran from rock to rock, sometimes half hiding behind the boulders, at other times boldly perching on the tops.

The soft parts are :---Irides hazel; bill, upper mandible dark horn-brown, lower rather paler; legs and toes ambercoloured.]

142. ANTHUS BRACHYURUS.

Z. Ngoye Hills, Oct. (1).

[This little Pipit was only observed in the Ngoye Hills of Zululand and at Illovo, near Durban—a pair being seen in each locality. It frequents open grassy hill-sides or flats and is skulking in habit, running with some celerity through the grass. It is not easily flushed, but rises well within shot and utters a weak "pip pip" note, springing almost abruptly upwards, but seldom flying far, then descending precipitately to the ground and instantly running.

The soft parts are :---Irides hazel; bill horn-brown, lower mandible rather paler; legs and toes amber-brown.]

ANTHUS CAFFER.

Sundevall, Œfv. Vet.-Akad. Förh. 1850, p. 100.

Tv. Woodbush, May (2).

The history of this species will be found at length in the Annals S. Afr. Mus. iii. 1905, p. 375.

[Some three or four specimens of this species were observed among the grassy hill-sides dotted with trees around the Woodbush Village. Except for its larger size, it resembles *A. brachyurus*.

The soft parts are :--Irides hazel; bill, upper mandible horny brown, lower paler brown; legs and toes amberbrown.]

143. ANTHUS NICHOLSONI.

CC. Klipfontein, April, May, July (8); Z. Jususie Valley, Dec. (1); Umfolosi Station, July (1); Tv. Wakkerstroom, Apl. (1); Zuurbron, May (1); Woodbush, June, Dec. (2). The examples from Namaqualand are paler and more rufous; they agree with those from Deelfontein and with the type of the species from Sigonell on the Vaal River. The Eastern examples are rather more olivaceous ashy and have slightly longer bills; they may be considered as approaching *A. sordidus* Rüpp. of East Africa.

[Nicholson's Pipit was found in Zululand and the South-Eastern and North-Eastern Transvaal, but cannot be said to be plentiful. Like *A. pyrrhonotus* it frequents grass country, and it is not easily distinguishable from that species.

The soft parts are:-Irides hazel; bill, upper mandible horn-brown, lower much paler; legs and toes amberbrown.]

144. ANTHUS PYRRHONOTUS.

CC. Knysna, Apl. (1); Plettenberg Bay, Feb., Mch. (4); Z. Sibudeni, Oct., Nov. (5); Tv. Woodbush, Nov. (1).

The examples from Zululand and the Transvaal have shorter hind claws and come very near A. p. gouldi.

[This Tawny Pipit was found in the Knysna district, Upper Zululand, and the Woodbush Hills of the North-Eastern Transvaal. It occurred both singly and in pairs, and frequented the open grassy hill-sides. It can run at a good speed, but readily flies when disturbed, although seldom going far. It is not easily distinguishable in the "veld" from A. nicholsoni or A. rufulus.

The soft parts are :--Irides hazel; bill, upper mandible horn-brown, lower yellowish brown; legs and toes pale brown.]

145. ANTHUS RUFULUS.

Z. Sibudeni, Oct., Nov. (3); Umfolosi Station, July (2); Tv. Wakkerstroom, Mch., Apl. (6); Pietersburg, Mch. (1); Woodbush, May, Nov. (2).

["Ncelu" of Zulus.

The Lesser Tawny Pipit was found in Zululand and the South-Eastern and North-Eastern Transvaal. It seems to frequent low and high veld indiscriminately, and is always seen where the grass is more or less thick and in the low country where the bush is more open. In general habits it resembles *A. pyrrhonotus* and *A. nicholsoni*.

The soft parts are:-Irides hazel; bill, upper mandible horn-brown, lower yellowish horn-coloured; legs and toes palish brown, in some specimens pale amber-coloured.]

147. MOTACILLA VIDUA.

N. Illovo, Nov. (1); **Tv.** Klein Letaba, July, Sept. (3); **P.** Tete, Sept. (2).

I quite agree with Mr. Grant's remarks about the winter plumage of this Wagtail. These birds have the black flanks characteristic of M. vaillanti (=M. nigricotis Shelley).

[In the small series of this Wagtail collected there are birds taken in the winter and summer seasons with entirely black heads and backs. This caused me to carefully overhaul the very fine series in the British Museum, and I find that there is no evidence to shew that this species assumes a winter plumage with an ashy-brown back. But there is every evidence to shew that the fully adult birds moult once a year, and that this takes place in the autumn, the black upper parts being therefore retained throughout both the winter and summer seasons. Also that young birds moult from the first plumage into an ashy-brown-back stage ; the adult feathering apparently being assumed in the second year.

This Wagtail was only observed on the Tugela River at Bond's Drift, Natal, the low country of the North-Eastern Transvaal, and in the Tete district of the Portuguese country. It is partial to the land-locked mouths of rivers near the coast and the broad sandy rivers inland, like the Klein Letaba, the Mazoe and the Zambesi. Usually observed in pairs, sometimes in threes, in appearance and habits it greatly resembles the European Pied Wagtail (*M. lugubris*). The call is the Wagtail "Chiswick," and the flight is low, undulating, and graceful.

The soft parts are:-Irides dark brown; bill, legs and toes black.]

148. MOTACILLA CLARA.

Motacilla longicauda Rüpp. (nec Gmel.), Stark & Sclater, Bds. S. Afr. i. p. 257.

Z. Ngoye Hills, Oct. (1); P. Tambarara, Apl. (2).

[The Grey-backed Wagtail was only noted from the two localities where specimens were secured. In Zululand only a single pair was seen, both individuals being shot, but the female lost. In the Gorongoza district some two or three pairs were observed altogether. This Wagtail frequents rocky streams overhung with bush and large trees, and can be seen perched on some rock in mid-stream, running and taking short darting flights to catch some passing insect, or flitting with low and graceful flight from one rock to another. The call is the usual "Chiswick" of the Wagtails, and in general actions and habits this bird resembles the other species.

The soft parts are :--Irides hazel; bill blackish; legs and toes grey-brown.]

149. MOTACILLA CAPENSIS.

CC. Klipfontein, May (5); Port Nolloth, Aug. (1); Durban Road, Sept. (1); Knysna, Dec. (5); **Z.** Jususie Valley, Nov. (2); **Tv.** Wakkerstroom, Mch. (5); Klein Letaba, Aug. (1); Pietersburg, Mch. (1); Turfloop, Mch. (1).

Examples from Klipfontein, Zululand, and Pietersburg all match one another perfectly.

["Quick-stertje" of Colonists.

The Cape Wagtail was commonly observed in all localities from the Cape and Namaqualand to Natal, Zululand, and the North-Eastern Transvaal, but nowhere in the Portuguese country. It was seen both singly and in pairs, and frequented indiscriminately the banks of rivers and streams, vleis, and dams, both in open and bushed country. Its call and actions are those of *M. vidua*, but it is easily distinguishable from that species by its colour.

The soft parts are :--Irides dark brown; bill, legs and toes dark brown.]

155. PROMEROPS CAFER.

CC. Knysna, Apl. (1).

["Groot-zuiker vogel" of Colonists.

This species was only observed in the Cape Peninsula and the Knysna district, in both of which localities it was not uncommon, but was wild and difficult to shoot. It frequents the more open hill-sides and mountain tops, where Proteas abound, and on the nectar of these plants it principally feeds. Its general habits are well described by Stark and Sclater, and need no further repetition.

The soft parts are :---Irides hazel; bill, legs and toes black.]

156. PROMEROPS GURNEYI.

Tv. Zuurbron, May (1).

[I have only observed this species among the "Zuikerbosch" (*Protea*) clad mountains which divide the eastern side of the Wakkerstroom district from Swaziland. There it was not uncommon, but like *P. cafer* was very wild, and I only succeeded in getting within shot of one specimen. In habits it resembles *P. cafer*.

The soft parts are :--- Irides dark brown; bill, legs and toes black.]

157. NECTARINIA FAMOSA.

CC. Klipfontein, May, June, July (14); Anemous, May (3); Durban Road, Mch., Sept. (2); Plettenberg Bay, Mch. (2); **Z.** Sibudeni, Sept., Oct. (2); Umfolosi Station, July, Aug. (2); **Tv.** Wakkerstroom, Feb., Mch. (5); Woodbush, Nov., Dec., May, June (5).

Mr. Grant, if I rightly understand his argument, believes that there is no true winter plumage to the males of the Malachite Sun-bird. This certainly seems to be borne out by the Namaqualand series; there are males in full plumage dated May 8, 23, 24, 27, June 4, and July 17, 18, that is all through the winter months.

On the other hand, I can find no other adult males in breeding-dress taken in the three winter months either in the present collection or in the British Museum series. All the birds taken at this time are in what Mr. Grant calls the semi-adult stage, which I take to be a winter plumage.

My recollections of the very large series in the South-African Museum also confirm my belief that there is a double moult, after and before the breeding-season.

However, the matter requires further careful investigation by some observer in the field before a final conclusion can be reached.

[This series shews that the adult metallic plumage of the male is retained throughout the year, there being only one moult, which takes place after the breeding-season, in the autumn months from March to May. The series of immature males seems to shew that there are two complete plumages before the adult stage is reached.

1st. The first plumage.

2nd. A semi-adult plumage with the tail (the central pair of feathers also developed), wings, and rump as in the adult, but only a few metallic feathers on the mantle and under parts, which are otherwise as in the adult female.

This plumage is assumed in the autumn and winter following the nesting-season, that is to say, between the months of March and June, though birds of a late brood may still be found moulting in July and August. The full adult feathering is then attained in the autumn and winter of the second year, a complete moult again taking place, which is completed by the end of August. Therefore some adult males killed in October and November are less worn than others ; these being the immature birds that have assumed the metallic feathering during the previous autumn and winter—that is to say, March to August.

The following examples are in the collection :--

 \mathcal{S} , young. 20 March.—This bird is in full moult, and is assuming the metallic wings and tail of the adult, but both dull and metallic feathers are replacing the young plumage on the breast and mantle; the head and throat not yet shewing signs of moult.

3, immature. 17 May.—This bird has almost completed its moult, the wings, rump, and tail being as in the adult; SER. IX.—VOL. V. U the new feathering of the head, mantle, and under parts being as in the adult female, interspersed with a few metallic feathers, some of which still shew the shaft-scales.

 \mathcal{S} , immature. 14 March.—This bird is in full moult, and is obviously changing from the second plumage to the full adult, as all the old feathers are very much worn, the long central tail-feathers being worn to a thread; the head, mantle, and under parts have hardly started to change, but what feathers are appearing, are metallic.

3. 23 June.—This specimen is in full moult and has practically assumed its complete adult feathering, only a few worn dull feathers being left on the head and nape, lower flanks, and under tail-coverts.

When the series in the Rudd Exploration Collection is laid out along with the fine series of immature males in the Museum Collection, the sequence of plumage appears very complete.

This large Sun-bird was commonly noted in Namaqualand, the Cape Peninsula, the Knysna district, Natal and Zululand, and the South-Eastern, Eastern, and North-Eastern Transvaal, but was not seen anywhere in the Portuguese country. It frequents the more open hill-sides and mountainous districts, seldom occurring in densely wooded localities and never inside the forests. It especially frequents localities where Proteas abound and feeds on the nectar of these and other flowering shrubs when in season, varying its diet with insects. When they are in flower, it can always be found where Aloes of the *Aloë arborescens* group exist.

The males are rather pugnacious, especially in the breedingseason, and chase each other with swift and twisting flight, the metallic plumage shining in the sun. This species is seen in pairs, but more often singly. The call of both sexes is a loud chirrup, the males often indulging in a loud and not unmelodious song uttered from the top of some twig or shrub. I have not discovered an occupied nest.

The soft parts are :--Irides hazel; bill, legs and toes black.]

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158. CINNYRIS MARIQUENSIS.

Tv. Klein Letaba, Sept. (1).

[This Sun-bird was only observed in the low country of the North-Eastern Transvaal, where it was decidedly scarce. The male of a pair was shot on the overhanging bough of an acacia, whence it continually darted out, apparently to catch some passing insect, and returned again to the same perch; between each flight it warbled quietly to itself. On the male being shot the female flew off and was not again seen.

The soft parts are :--Irides dark brown; bill, legs and toes black.]

158 a. CINNYRIS MICRORHYNCHUS.

P. Coguno, June, July, Aug. (7, all \mathcal{J} s); Masambeti, Nov. (1 \mathcal{J}).

[This species was found only in the Inhambane and Beira districts of the Portuguese country. In the former locality it was plentiful, and came in numbers in company with other Sun-birds to the "caout-chouc" and other trees that were in full flower around my Coguno camp. It has a quick darting flight, frequently hovering to gather the nectar from the blossoms. In the Beira district only a few were seen frequenting the blossoms of the cotton-plants in the plantations.

The soft parts are :--Irides dark brown; bill, legs and toes black.]

159. CINNYRIS LEUCOGASTER.

Z. Hluhluwe stream, Aug. $(1 \ \mathcal{S}, 1 \ \mathcal{P})$; **Tv.** Klein Letaba, Sept. $(4 \ \mathcal{S}, 3 \ \mathcal{P})$; Turfloop, Mch. $(1 \ \mathcal{S})$; **P.** Tete, Aug. $(1 \ \mathcal{S})$.

[The single male from Tete is slightly smaller than the other specimens.

This striking little Sun-bird was noted from S.E. Zululand, the Eastern and North-Eastern Transvaal, and the Tete district of Portuguese East Africa, where, however, only a single specimen was seen. It cannot be said to be plentiful anywhere, although a fair number were observed in the low country of the North-Eastern Transvaal. Apart from colour, in actions and flight it much resembles the other small Sun-birds, and is usually found around flowering trees and shrubs, especially the *Kigelia* and flowering Aloes (*Aloë arborescens*).

The soft parts are :--Irides dark hazel; bill, legs and toes black.]

159 a. CINNYRIS VENUSTUS NIASSÆ.

Reichenow, Vög. Afr. iii. p. 474.

P. Tambarara, Mch., Apl. (6).

This subspecies is distinguished from *C. venustus*, found in West Africa as far south as Gaboon, by the rich yellow of its under parts and the more orange and less crimson shade of its pectoral tufts. It was noted from Zumbo by Alexander, and Gazaland by A. L. Sclater and Swynnerton.

[Only found in the Gorongoza district, where it was not uncommon, and frequented the flowering climbers and shrubs, especially a species of honeysuckle. In flight it resembles the other small Sun-birds, but the call is somewhat sharper. The male often indulges in a sweet warble.

The soft parts are :--Irides dark brown; bill, legs and toes black.]

160. CINNYRIS AFER.

CC. Knysna, Jan., Feb. (17); **Z.** Sibudeni, Oct. (2); Jususie, Dec. (1); **Tv.** Woodbush, June, Dec. (2); Legogot, Apl., May (3).

["Zuiker-beccie" or "Zuiker-vogel" of Colonists (as are all Sun-birds).

When it is once assumed the males retain their metallic plumage throughout life, the yearly moult taking place in the autumn season—January to March. Young birds moult directly into the adult feathering in the autumn following the nesting-season. In the more northern localities this species appears to breed somewhat late, and two broods are sometimes reared, as birds in the first plumage were taken in May and June. Whether these late birds retain this plumage till the following autumn is not known; but

it is probable that the adult stage is assumed in the spring following the winter in which they are hatched.

The Greater Double-collared Sun-bird was found in the Knysna district, Zululand, the Eastern and North-Eastern Transvaal, and was particularly plentiful in the two former localities. It is found both in the forests and on the open hill-sides, and feeds principally on the nectar of flowering plants and shrubs, especially Proteas and certain Aloes, in common with most of the other Sun-birds, varying its diet with small flies and insects, which also are taken from the flowers. The flight is swift, and it will often hover to extract the nectar from flowers. It is generally seen in pairs, though often solitary ; the call is sharp and short, the males sometimes uttering a rather sweet warbling song from a twig or the top of a bush. Except for its size, which is not always striking, it cannot be distinguished from the two following species.

The soft parts are :--Irides dark hazel; bill, legs and toes black.]

162. CINNYRIS CHALYBEUS.

CC. Klipfontein, May, June, July (7); Port Nolloth, Aug. (1); slopes of Table Mt., Feb. (1); Durban Road, Mch., Sept. (6).

[The sequence of plumage in this species appears to follow closely that of *C. afer*. The Lesser Double-collared Sun-bird was noted only in Namaqualand and the Cape Peninsula, in both of which localities it is very plentiful; it was less common in the Knysna district. In these localities it feeds principally on the nectar of Proteas where they occur, flowering heather, and climbing plants, and is commonly seen around habitations taking nectar from the cultivated plants. growing in the gardens and on the walls and porches; it is so tame and fearless that it has often been known to nest in the latter situations. In appearance and call it resembles. *C. subalaris*.

The soft parts are :-- Irides dark hazel; bill, legs and toes black.]

CINNYRIS CHALYBEUS SUBALARIS.

Reichenow, Vög. Afr. iii. p. 491 [Pondoland].

CC. Knysna, Dec., Jan. (7); Plettenberg Bay, Feb. (1); Z. Sibudeni, Oct., Nov., Dec., Jan. (11); Tv. Zaurbron, Apr., May (3); Woodbush, Nov. (3).

This form, recently described by Reichenow, cannot be considered anything but a slightly differentiated subspecies. It has a rather longer bill, averaging in six Zululand males 22.3 against 19.6 mm. in six Klipfontein males of the typical form. The lower breast is slightly washed with yellowish, which is absent in that of the typical form; but I am unable to distinguish the two subspecies by the under wing-coverts as is done by Reichenow.

The examples from Knysna are all juveniles or females and are difficult to determine; on the whole, I think that they come nearer to *C. subalaris*. In the British Museum examples from Durban, and from Macamac in the Transvaal, are referable to this subspecies, while those from Deelfontein are undoubtedly *C. chalybeus* proper.

[The sequence of plumage of this species appears to be coincident with that of *C. afer.* The Intermediate Doublecollared Sun-bird was found in the Knysna district, Zululand, the South-Eastern and North-Eastern Transvaal. It was rather scarce in the Knysna district, which is probably its extreme western limit, but was the commonest of the Sunbirds in Zululand and in the South-Eastern Transvaal. It seems to be more partial to forest than either *C. afer* or *C. chalybeus*; but in general habits, flight, and call it exactly resembles them.

The soft parts are :-- Irides dark brown ; bill, legs and toes black.]

CINNYRIS NEERGAARDI. (Plate III.)

Claude Grant, Bull. B. O. C. xxi. p. 93 (May 1908). [Type, Coguno, Sept. 5.]

P. Coguno, July, Aug., Sept. (2 3, 1 3 jr., 2 9).

This interesting little Sun-bird comes near C. mediocris and



H.Grönvold del. et lith.

West, Newman imp

CINNYRIS NEERGAARDI & & Q.

C. reichenovi from East Africa, from which, however, it is readily distinguishable by the sooty-brown colour of the breast and abdomen. This character also at once distinguishes it from the other Double-collared Sun-birds of South Africa; it has, moreover, a very short bill, averaging 15 mm. What I take to be a young male, dated Aug. 3, is without the yellow tufts and has the abdomen greyish white. Two females in the series collected I can only distinguish from those of C. chalybeus by their short bills.

[This pretty little Sun-bird was only found in the type locality, where it could not be considered common; it frequented certain flowering climbers bordering the paths and roads and a large species of flowering tree growing near my camp, in company with the other species of Sun-bird. In flight and call it resembles *C. microrhynchus*.

The soft parts are :--Irides dark brown; bill, legs and toes black.]

163. CHALCOMITRA GUTTURALIS.

Z. Umfolosi Station, July (1); Hluhluwe Stream, Aug. (1); Tv. Klein Letaba, Sept. (6); P. Coguno, June, Aug. (5); Masambeti, Oct. (1); Tambarara, Mch., Apl. (3); Tete, Aug. (1).

[The Scarlet-chested Sun-bird was noted from the coast country of Natal and Zululand, the low veld of the North-Eastern Transvaal, and the Inhambane, Beira, Gorongoza, and Tete districts of Portuguese East Africa. It seems to be more or less confined to the low "bush-veld" country, and is commonly found wherever *Kigelia* exists, from the crimson blossoms of which it extracts nectar, poised on rapidly beating wings. In the Imhambane district it feeds on this and the "caout-chouc" tree. Like most of the other Sun-birds, it varies its diet with insects. The flight is swift and darting, the call being loud and sharp, and the adult males sometimes indulging in a few warbling notes of a song.

The soft parts are :---Irides dark brown; bill, legs and toes black.]

166. CHALCOMITRA KIRKI.

P. Coguno, Sept. (2); Masambeti, Nov. (1); Tambarara, Apl. (1).

[This species was observed in the Inhambane, Beira, and Gorongoza districts of the Portuguese country, where it replaces the former species. In habits, call and flight it resembles *C. amethystina*.

The soft parts are :--Irides dark brown ; bill, legs and toes black.]

164. CHALCOMITRA AMETHYSTINA.

CC. Knysna, Jan., Apl. (2); Plettenberg Bay, Mar. (1); **Z.** Sibudeni, Oct., Dec., Jan. (8); Jususie, Dec. (1); Umfolosi Station, July (2); Ngoye forest and hills, Sept., Oct. (2); **Tv.** Woodbush, Jan., Feb., June (6); Turfloop, Mch. (1); Legogot, May (2).

["Neu-neu" of Zulus.

The sequence of plumages of the male of this species seems to follow that of *C. gutturalis*.

The Black Sun-bird was noted from the Knysna district, where it was not plentiful, Natal and Zululand, and the Eastern and North-Eastern Transvaal. As a rule it frequents higher and more open country than *C. gutturalis*, feeding principally on the nectar of flowering Proteas and Aloes. In call and flight it resembles *C. gutturalis*, the females being indistinguishable from the females of that species unless observed at very close range or accompanied by males.

The soft parts are :--Irides dark brown; bill, legs and toes black.]

167. CHALCOMITRA FUSCA.

CC. Klipfontein, June, July (3); Anemous, June (1).

[Since the Central Cape Colony trip this Sun-bird has only been found in Namaqualand, where it was not uncommon, frequenting the bushes on the hill-sides and in the kloofs, and feeding on the nectar of flowering heaths and Aloes (*Aloë arborescens* and *A. dichotoma*); it was not noticed on the sand veld within ten miles of the coast.

The soft parts are :--Irides dark brown ; bill, legs and toes black.

168. CHALCOMITRA VERREAUXI.

N. Illovo, Nov. (2).

[Verreaux's Sun-bird was noted from Natal only. The pair obtained were shot at the edge of a patch of coast bush.

The soft parts are :---lrides dark brown; bill, legs and toes black.]

CHALCOMITRA VERREAUXI FISCHERI.

Reichenow, Vög. Afr. iii. p. 453. [Type from Mozambique.]

P. Coguno, Sept. (2).

This subspecies can be distinguished by its slightly paler colour below, and by its shorter bill, averaging 20.21 against 24.25 mm. in the typical form. It is a barely separable subspecies.

169. CHALCOMITRA OLIVACEA.

N. Illovo, Nov. (7); **Z.** Sibudeni, Jan., Oct. (5); Hluhluwe stream, Aug. (1).

Some of the specimens from Illovo possess an admixture of orange-red in the pectoral tufts, the differentiating character of *C. olivacea daviesi*, recently described by Haagner from Pondoland. I think it is doubtful if that subspecies can be maintained.

[Both sexes are found with cinnamon-coloured tips to some of the throat and upper breast-feathers. This may be due to great age, but cannot at present be proved.

The Olive Sun-bird was only found in Natal and Zululand, where it was plentiful, frequenting the edges of the coast bush, and in the latter locality occurring both on the open hill-sides among the Proteas and aloes and in the forests. It has an ordinary Sun-bird call and is usually found in pairs.

The soft parts are :--Irides dark brown; bill, legs and toes black.]

170. ANTHOBAPHES VIOLACEA.

CC. Table Mt. slopes, Jan., Feb. (2); Plettenberg Bay, Feb., Mch. (13).

["Zuiker-bekkie" or "Zuiker-vogel" of Colonists.

Found only in the Cape Peninsula and the Knysna,

where it occurs among the heather-clad slopes of the mountains and hill-sides. It was especially plentiful in the latter locality and was in pairs. It feeds principally on the nectar of flowering heaths and Proteas. The call is a sharp "zwi," the male sometimes indulging in a warbling song; the flight is swift and erratic. I did not discover any occupied nest.

The soft parts are :--Irides hazel; bill, legs and toes black.]

171. ANTHOTHREPTES COLLARIS.

N. Illovo, Nov. (3); Z. Sibudeni, Jan., Oct. (2); Ngoye Hills, Sept., Oct. (3).

[This Collared Sun-bird was found only in Natal and Zululand, where it was very plentiful, generally being observed in pairs; it frequents low bushes and trees both on the outskirts of and in the woods and forests, and feeds on insects and nectar; I think more largely on the former than do other Sun-birds. It has rather a weak call, and no song that I have heard; it is very tame and confiding, often approaching so close that shooting is impossible.

The soft parts are :--Irides brown; bill, legs and toes black.]

172. Anthothreptes collaris hypodilus.

P. Coguno, Sept. (2); Masambeti, Nov. (1); Beira, Dec., Jan. (2); Tambarara, Mch., Apl. (2).

[This form was found in the Inhambane, Beira, and Gorongoza districts of Portuguese East Africa, where it was by no means common, and frequented the lower bushes and trees in the woods and forests. In appearance, call, and general habits it resembles *A. collaris*.

The soft parts are :--Irides brown ; bill, legs and toes black.]

ANTHOTHREPTES REICHENOWI.

Gunning, Ann. Transvaal Mus. i. p. 173.

P. Beira, Jan. (1).

This is a young bird without metallic colour or tufts. It is dark olive above and paler below, becoming pale yellow on

the breast and abdomen. The wing measures 54 mm. It closely resembles *Anthothreptes seimundi*, a species recently described by Ogilvie-Grant from West Africa, which extends to the Semliki Valley in Central Africa.

I am inclined to identify it with Anthothreptes reichenowi Gunning, also from Beira, but I have not seen the types, which are in the Pretoria Museum.

[The single specimen obtained was solitary, and was shot among the tops of some small bushes in one of the many stretches of woodland which are a common feature of the Beira district. It was silent, and was apparently searching for insects among the branches.

The soft parts are :- Irides brown; bill, legs and toes horn-brown.]

173. ZOSTEROPS ANDERSSONI.

P. Coguno, Aug., Sept. (5); Tambarara, Mch. (2).

[This dainty little "White-eye" was only found in the Inhambane and Gorongoza districts of the Portuguese country. It was rather scarce in the latter locality, but was by no means uncommon in the former. It was usually observed in pairs or small parties of from four to six, never more; it frequented the tops of the larger trees, especially the "caout-chouc." Besides insects, which form its principal food, it pecks and eats a certain amount of wild fruit and enjoys the nectar of certain flowering trees. It is a very active bird and is continually uttering a low call-note.

The soft parts are :---Irides very pale brown; bill black, base of lower mandible whitish; legs and toes pale slatecoloured.]

174. Zosterops virens.

Z. Sibudeni, Oct., Nov., Dec., Jan. (10); Ngoye Hills, Oct. (1); **Tv**. Wakkerstroom, Mch. (1); Zuurbron, May (11); Woodbush Hills, Nov. (11); Legogot, May (1).

[This was quite the commonest of the White-eyes and was noted in large flocks of twenty or more individuals in all the forest areas of Natal and Zululand, the South-Eastern, Eastern, and North-Eastern Transvaal. It was breeding in the North-Eastern Transvaal, and I saw several nests, all of which, however, contained newly hatched young. They were deeply cup-shaped and neatly composed of webs and moss, and were suspended by each end from an overhanging branch or creeper; they harmonized remarkably with their surroundings. In general habits this species resembles the other "White-eyes."

The soft parts are :--Irides pale brown ; bill black, pale slate-coloured at base of lower mandible ; legs and toes pale slate-coloured.]

175. ZOSTEROPS PALLIDA.

CC. Klipfontein, June, July (2).

I see no reason to reject Swainson's name, which dates from 1838, for this species. His description applies very well and is founded on an example from Dr. Burchell's collection, doubtless from the interior parts of Cape Colony.

["Glas-oogie" and "Wit-oogie" of Colonists.

The Pale White-eye was only found in Namaqualand, where it was observed on two or three occasions; it was always in small parties, and frequented the bushes and stunted trees in the kloofs and at the bases of the kopjes and mountains, generally near water. Its habits and callnote resemble those of Z. capensis.

The soft parts are :--Irides pale brown ; bill pale slatecoloured ; legs and toes pale bluish-slate-coloured.]

176. ZOSTEROPS CAPENSIS.

CC. Table Mt. slopes, Jan. (5); Durban Rd., Sept. (1); Knysna, Dec., Jan., Feb. (5).

Reichenow uses Swainson's name * "annulosa" for this species; I have carefully compared Swainson's description with examples of the Cape and Madagascar White-eyes, and cannot doubt that it refers to the latter species. I prefer therefore to use Sundevall's later name, founded on Levaillant's plate and description, in regard to which there can be no doubt at all.

* Sylvia annulosa Swainson, Zool. Ill. iii. pl. 164 (1823).

["Glas-oogie" of Cape Colonists.

The Cape "White-eye" was found only in the Cape Peninsula and the Knysna, where it was very common, and frequented all wooded and forested localities, often in flocks of twenty to thirty individuals. It is an active and lively little bird, being continually on the move, searching every bush and tree diligently for insects, and uttering all the time a low pretty call-note in order to keep in touch with its companions in the thick vegetation.

The soft parts are :--Irides pale amber-coloured; bill, legs and toes pale bluish-slate-coloured.]

177. PARUS AFER.

CC. Klipfontein, Apl., May, July (7); Port Nolloth, Aug. (1).

I think Mr. Grant must have been mistaken in his observation of this species in Zululand.

[Since the Central Cape Colony trip the Grey Tit has only been taken in Namaqualand, where it was common; a single pair were seen at Sibudeni in Zululand. It is usually observed in pairs and frequents gardens and orchards and bushy kloofs. A very active species, it is continually on the move. Its call and alarm-note are similar to those of the European Great Tit (*Parus major*).

The soft parts are :--Irides hazel ; bill black ; legs and toes dark slate-coloured.]

177 a. PARUS CINERASCENS.

Tv. Woodbush, Jan. (2).

[The pair obtained in the North-Eastern Transvaal are the only examples that were seen of this species. They were shot in a well-timbered piece of country near the village. In habits, call, and soft parts it resembles *P. afer*.]

179. PARUS NIGER.

Tv. Woodbush, May, June (3), Klein Letaba, July, Aug., Sept. (6); **P.** Coguno, Aug. (2); Masambeti, Oct. (1); Beira, Feb. (2); Tete, Sept. (2).

[I have examined the type of *P. xanthostomus* of Shelley and find that it is a very young example of *P. niger*. This

is borne out by two specimens from Beira, both of which are in the plumage of P. xanthostomus and are assuming the darker dress of P. niger. There is also a specimen from Durban. Natal, in the British Museum which shews this even more clearly. The Black Tit was not noted in Natal or Zululand, but was found in the Eastern and North-Eastern Transvaal, and the Inhambane, Beira, Gorongoza, and Tete districts of Portuguese East Africa. In the Inhambane and Beira districts it was by no means plentiful, but in the North-Eastern Transvaal it was especially so. It was observed in pairs and family-parties, and frequented the larger trees and the edges of the woods; it was active and continually on the move, searching every crevice of the bark and every branch for insects, while uttering at intervals its trilling call-notes, which reminded me, with its alarm-notes, of the European Great Tit (Parus major). In actions and habits it is a true Tit.

The soft parts are :--Irides dark brown ; bill black ; legs and toes dark slate-coloured. In the young the inside of the gape of the mouth is yellow, which disappears and darkens with age.]

182. ÆGITHALUS CAROLI.

Z. Umfolosi Station, Aug. (1); Tv. Woodbush, May (1); P. Coguno, July (1).

This Penduline Tit was only noted from Southern Zululand, the North-Eastern Transvaal, and the Inhambane district of the Portuguese country. In each of these localities it was only observed on one occasion and each time in small parties, which were diligently searching the bushes for insects and uttering a low call-note. It is an active little bird and in many ways reminded me of the Zosterops.

The soft parts are :--Irides hazel; bill, legs and toes slatecoloured.]

183. UROLESTES MELANOLEUCUS.

Z. Umfolosi Station, July (1); Tv. Klein Letaba, July, Aug., Sept. (8).

["Iyuma" of Zulus. "Chilauli" of Tchangaans.

This bird was only seen in the south-eastern side of Zululand and the "bush veld" of the North-Eastern Transvaal. It was not common in the former, but was very plentiful in the latter locality, although somewhat wary. I have observed it only singly or in pairs, and it frequents the tops of trees or thorn-bushes, whence it catches its prey, which consists of insects, such as grasshoppers, usually on the ground. It has a strong, somewhat dipping flight; and the call, which is constantly repeated, is loud and rather harsh and is best interpreted by the Tchangaan native name.

The soft parts are :--Irides hazel; bill, legs and toes black.]

184. LANIUS COLLARIS.

CC. Klipfontein, May, June, July (7); Port Nolloth, Aug. (1); Table Mt. slopes, Jan., Feb. (2); Durban Rd., Mch., Sept. (4); Plettenberg Bay, Feb., Mch. (6).

One nest and three eggs taken at Durban Road, Sept. 24th.

LANIUS COLLARIS HUMERALIS.

Lanius humeralis Reichnw. Vög. Afr. ii. p. 609.

Z. Jususie Valley, Dec. (2); Umfolosi Station, Sept. (1); Tv. Wakkerstroom, Feb., Mch. (8); Woodbush, June (1); Legogot, Apl. (1).

This series very clearly shews the change from the greybreasted typical form, which always retains slight traces of mottled marking underneath, to the pure white-breasted "humeralis" type.

["Canaribyter," "Fiscaal," or "Goatsman" of Colonists. "Eqola" of Zulus.

The Fiscal Shrike was noted from Namaqualand, the Cape Peninsula, the Knysna district, Zululand, the South-Eastern, Eastern, and North-Eastern Transvaal. In the latter locality it was rare, only some two or three specimens being observed. It is usually seen sitting on the tops of bushes, posts, or other conspicuous positions ; and wherever a pair have taken up their quarters a regular larder is found, insects of all kinds, from a fly to large grasshoppers, and often young birds, and on one occasion a frog, having been seen impaled on any convenient thorn-tree or sometimes on barb-wire fences. The call is harsh and loud, and the flight graceful, low, and undulating. It apparently breeds early, as eggs and fledged young birds were taken in September. I took the nest containing three eggs on the 24th of September, 1903, near Cape Town; it was composed of twigs of a common herbaceous plant interspersed with rag and string, and lined with fine grass and fibre; it was placed in the fork of an apple-tree some twelve feet from the ground in an orchard.

The soft parts are:-Irides hazel; bill, legs and toes black.]

187. LANIUS COLLURIO.

Tv. Woodbush, Dec. (1); Turfloop, Mch. (3); **P**. Beira, Dec., Jan. (4).

[I have not seen the Red-backed Shrike elsewhere than in the two localities where specimens were secured. In the Beira district it was very plentiful. It is usually observed sitting on stumps or posts of fences; it is very silent and by no means wild.]

189. NILAUS BRUBRU.

Tv. Klein Letaba, Aug. (3).

[This species was only observed in the "bush-veld" of the North-Eastern Transvaal, where it was not common, being only occasionally seen searching for insects among the branches and foliage of the Mopani trees.

The soft parts are :---Irides rich brown; bill, upper mandible blackish slate-coloured, lower paler slate-coloured; legs and toes slate-coloured.]

191. TELEPHONUS SENEGALUS.

Z. Umfolosi Station, Aug. (2); Ngoye Hills, Oct. (1); **Tv.** Klein Letaba, Aug., Sept. (4); Woodbush, Jan., June (3); Turfloop, Mch. (1); Legogot, May (1); **P.** Coguno, June, Aug. (3); Beira, Dec., Feb. (2); Masambeti, Oct. (1). These birds are indistinguishable from West and East African examples. A young example has brown edgings to the black feathers at the top of the head.

["Nqupane" of Zulus.

The Black-headed Bush-Shrike was noted from Zululand, the Eastern and North-Eastern Transvaal, and the Imhambane, Beira, Gorongoza, and Tete districts of Portuguese East Africa. It was by no means plentiful in Zululand, but became more so to the northwards. It inhabits welltimbered country and frequents the thickets and patches of thorn and "Num-num"; it spends much of its time on the ground searching for insects, which are its principal food. The call is harsh and loud and a few hurried notes of a song are sometimes heard. The flight is quick and darting, usually only from bush to bush, the bird always disappearing straight into the middle of the cover.

The soft parts are :—Irides raw sienna; bill blue-black; legs and toes lightish slate-coloured. In the female and young birds the base of the lower mandible is pale horny.]

192. TELEPHONUS TSCHAGRA.

CC. Plettenberg Bay, Mch. (1).

[Only one specimen of this Bush-Shrike was observed, and this was shot on the ground at the edge of a thick patch of prickly bush on Seal Point at the eastern end of Plettenberg Bay. It was silent and very tame.

The soft parts are :---Irides hazel; bill dark horn-coloured, somewhat lighter on lower mandible; legs and toes slatecoloured.]

193. TELEPHONUS AUSTRALIS.

Tv. Klein Letaba, Sept. (1); Turfloop, Mch. (1).

[This bird was found only in the North-Eastern Transvaal, where it was decidedly uncommon. It resembles *T. senegalus* in habits and in the localities it frequents, but is, I think, much more silent.

The soft parts are :---

2. Irides brown; bill black or horn-brown; legs and toes slate-coloured.]

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194. TELEPHONUS AUSTRALIS CONGENER.

Telephonus minor Stark & Sclater, Bds. S. Afr. ii. p. 23. **P.** Coguno, Sept. (1).

This is certainly the most southern record for this subspecies, hitherto only known to range to Tete, where it was obtained by Sir John Kirk.

[The one specimen taken of this bird was shot in a dense thicket, and was solitary and silent. It appears to exactly resemble T. australis in general habits &c.

The soft parts are :—Irides brown; bill black; legs and toes dark slate-coloured.]

195. Dryoscopus cubla.

CC. Knysna, Dec., Jan. (2); **N.** Illovo, Nov. (9); **Z.** Sibudeni, Oct., Nov., Dec., Jan. (7); **Tv.** Klein Letaba, July, Sept., Oct. (6); Woodbush, Jan. (1); Legogot, May (2); **P.** Coguno, July, Aug. (3); Masambeti, Oct., Nov. (3); Beira, Dec. (1); Tambarara, Mch. (2); Tete, Sept. (1).

["Equmusha" of Zulus. "Capok-vogel" of Colonists.

This is one of the commonest of the Shrikes in all forested, wooded, or well-timbered country, and was noted from the Knysna, eastwards and northwards through Natal and Zululand, the Transvaal, and the Portuguese country to the Zambesi. It is by no means wild, and can always be seen pottering about the shrubs and bushes in pairs.

In the breeding-season the male looks remarkably pretty when shewing off, the puff-back being extended like a powder-puff and the wings dropped; it will often also fly across from bush to bush, chasing the female, the wings being half dropped and rapidly quivering, and the feathers of the rump being extended to their fullest extent. All the while it utters its cheery notes, which cannot be easily rendered in English, but a quick pronunciation of the Zulu name gives an excellent idea of it.

It feeds principally upon insects, and the nests, of which I have seen several, though I have not succeeded in securing the eggs, are always placed in the fork of some shrub or small tree.

The soft parts are :---

3. Irides orange-yellow; bill black; legs and toes slatecoloured.

♀. Irides pale yellow; bill, upper mandible blackish, lower whitish horn-coloured; legs and toes paler slatecoloured.]

196. DRYOSCOPUS RUFIVENTER.

CC. Table Mt. slopes, Jan., Feb. (2); Durban Rd., Mch., Sept. (4); Knysna, Jan., Apl. (2); Plettenberg Bay, Feb. (1); **Z.** Ngoye Forest, Sept. (2); **Tv.** Woodbush, Jan., June, Nov. (4); Legogot, May (1); **P.** Coguno, Aug., Sept. (2).

The examples from Coguno are both females and should perhaps be referred to the tropical form *D. rufiventer hybridus* recognised by Reichenow, if it can really be separated; but the Coguno females exactly match females from Durban Rd.

["Zwart-Canaribyter" of Colonists.

This Shrike was commonly noted from the Cape Peninsula, the Knysna, Zululand, the Eastern and North-Eastern Transvaal, and the Inhambane district of Portuguese East Africa. It frequents forests and well-timbered country, and, except when young are about, is found in pairs. It feeds principally on colcopterous insects, and never, I believe, attacks small birds.

The whistle-call "hoo-hoo" of the male, followed immediately by the answering call of "ku-ee" of the female, at once betrays its presence. It is skulking in habits, and the flight, when indulged in, is of short duration.

The soft parts are :--Irides hazel; bill black; legs and toes slate-coloured.

In the young, the bill is brownish black.]

198. LANIARIUS MAJOR MOSSAMBICUS.

P. Beira, Nov., Dec., Jan. (4); Tete, Aug. (3).

The characters of the various subspecies of *Laniarius major* are by no means constant, but on the whole the Beira and Tete Shrikes seem referable to this form.

[This species was found only in the Beira, Gorongoza,

and Tete districts of the Portuguese country. In habits and call it exactly resembles L. rufiventer. The soft parts are also the same.]

200. Pelicinius gutturalis.

CC. Klipfontein, Apl., May, June (6); Port Nolloth, Aug. (2); Table Mt. slopes, Feb. (2); Durban R l., Mch. (2); Plettenberg Bay, Feb., Mch. (5); **Tv**. Wakkerstroom, Mch. (2).

A very young bird hardly out of the nest, marked Port Nolloth, Aug. 11th, is olive-green above and below, slaty grey, almost white, on the throat and centre of the breast. Young birds moult into adult plumage in February at Plettenberg Bay.

I think that we may conclude from a study of the above series that the nestling gradually acquires the green colour of the under parts and moults in autumn (February or March) into the adult livery.

[" Bacbakiri" of Colonists.

The Bacbakiri Shrike was noted from Namaqualand, the Cape Peninsula, the Knysna district, and the South-Eastern Transvaal. It was common in the two former localities, but rare in the latter. It usually frequents the vicinity of farms, where it is found in the orchards and on the lands, and is fond of perching on walls or posts; it feeds principally upon beetles and other insects. Its general habits and call, so well described by Stark and Sclater, are too well known to need repetition.

The soft parts are :--Irides hazel; bill black; legs and toes dark slate-coloured.

In the young the irides are greyish; the bill is horn-brown, the gape yellow; and the legs and toes are pale brown.]

201. Chlorophoneus quadricolor.

P. Coguno, June, Sept. (3).

[I have only heard and taken this pretty Shrike in the Inhambane district, where it was not uncommon. It frequents the thickets, where its cheery call of three syllables readily betrays its presence. It is usually in pairs,

and I am not sure that the first two notes are not the call of the male and the third that of the female. The alarmnote is a low "coop," and the bird often comes so close as it creeps about the bushes that shooting is impossible.

The soft parts are :--Irides hazel; bill black; legs and toes dull slate-coloured.]

202. Chlorophoneus rubiginosus.

Z. Sibudeni, Nov. (1); Ngoye, Sept. (1); **Tv.** Woodbush, Nov., Dec. (6); Legogot, Apl. (1).

The example from Legogot, a female shot on April 23, is exactly similar to *C. maraisi*, described by me some years ago from Knysna. I have no doubt now that it is nothing but *C. rubiginosus* in the young plumage, an opinion to which I was inclined from the first, though I allowed for Mr. Marais' repeated assurances that he had shot both males and females in this plumage with the sexual organs fully developed. Mr. Grant's notes shew that he is of the same opinion as myself.

[The C. maraisi of W. Sclater is, I think, nothing but the first complete plumage of C. rubiginosus, but young birds from the nest with authenticated parent birds are required to finally decide the question. The bird was only noticed in Zululand and the North-Eastern Transvaal. It is a forest-haunting species and unless carefully looked for can be easily overlooked. I could not satisfactorily determine the call of this bird, as I never actually saw one in the act of calling.

The soft parts are :---Irides russet-brown; bill black; legs and toes pale slate-coloured.

Of the young bird (i. e. *C. maraisi*) :—Irides dark brown, bill dark horn-coloured, pale yellowish at gape; legs and toes pale slate-coloured.]

205. Chlorophoneus sulphureopectus similis.

Reichenow, Vög. Afr. ii. p. 563.

Z. Umfolosi Station, July (1); **Tv.** Klein Letaba, Sept. (2).

This subspecies can be easily distinguished from the

West-African type-form, C. sulphureopectus, but I confess that I cannot distinguish it from the Orange-breasted Bush-Shrike of East Africa called C. s. chrysogaster by Reichenow.

[I have only found this species in the patches of dense thorn-bush scattered along the Umfolosi River in S.E. Zululand, and in the thickets bordering many parts of the banks of the Klein Letaba in the N.E. Transvaal. It is a skulking and rather wary bird and is seldom seen, but its whistling call can often be heard.

The soft parts are :—Irides dark hazel; bill black; legs and toes dark slate-coloured. In the φ the base of the lower mandible is palest.]

206. MALACONOTUS OLIVACEUS STARKI.

P. Coguno, July, Aug. (3); Tete, Sept. (1).

[I have noted this Shrike from the Eastern and North-Eastern Transvaal and the Inhambane, Beira, and Tete districts of Portuguese East Africa. It usually frequents dense bush and thickets and is more often heard than seen, its peculiar note being unmistakable. This call is a soft sort of cluck followed by a long loud whistle, the bird as it emits the sound throwing back the head and opening the beak. It is probably always in pairs although only single individuals are usually observed.

The soft parts are :--Bill black; legs and toes slate-coloured.

A male from Tete has the bill pale brown with darker markings, and is probably immature.]

207. NICATOR GULARIS.

P. Coguno, June (1); Tete, Sept. (1).

[The two birds secured are the only specimens I have seen of this species, and both were shot in the thickets. It appears to be a solitary and silent bird, and keeps to the lower branches of the trees and bushes in the densest scrub and thickets. It is not, I think, uncommon, but owing to its skulking and silent habits is easily overlooked.

The soft parts are :---Irides hazel; bill greyish brown; legs and toes slate-coloured. In the female the bill is much paler.]

210. SIGMODUS TRICOLOR.

P. Masambeti, Oct. (2); Beira, Dec. (6); Tambarara, May (3); Tete, Aug., Sept. (3).

[I have observed this species only in the Inhambane, Beira, Gorongoza, and Tete districts of the Portuguese country; it cannot, however, be considered plentiful, although it is often seen; it is at all times wary and difficult to secure. It frequents both open and ordinary forest country, keeping more to the tops of the larger trees than does *Prionops talacoma*, and I have not seen it hunting about in the native clearings. It is never found in such large flocks as that species, being usually seen in parties of six or eight. The call is somewhat different from that of *P. talacoma*, but when handled it snaps its beak as does that bird, and also when one is only wounded the others will return to see what has happened to their companions; on one occasion near Beira I secured a whole party of six by carefully keeping concealed.

I have not seen this bird nesting or even in pairs, but always in flocks, even when with young.

The soft parts are :--

Ad. Irides yellow; wattles round eyes dark tomato-red; bill tomato-red, tip yellow; legs and toes pale tomato-red, nails horny.

Imm. in changing plumage. Colours as in the adult, but the wattles round eye and bill paler.

Imm. Colours as in the adult, but wattles paler, and bill paler and more dusky.

Juv. Irides dark brown, eyelid slightly yellow; bill blackish brown, slightly yellow at gape; legs and toes pale yellow.]

SIGMODUS SCOPIFRONS.

C. Grant, Bull. B. O. C. xxi. p. 66; Reichenow, Vög. Afr. ii. p. 537.

P. Masambeti, Nov. (1).

This species, as noted by Grant, is new to the South African fauna. It has been since met with also by Sheppard (Journ.

S.A. O. Union, v. p. 30) in the neighbourhood of Beira, but it appears to be a rare species there.

It was first described by Peters from Mozambique, and this is its most southern limit hitherto; it goes north to Lamu in British East Africa.

[I have only once seen this species, when a flock of six individuals were observed in the tops of some trees in a strip of forest near the Masambeti Stream. In cry and habits it resembles *S. tricolor*, and it was only when I picked up the specimen shot that I discovered it was different. I did not again see the birds, although the locality was passed through on most days.

The soft parts are :---

Irides bright yellow, with a narrow outer ring of bloodorange; wattles round eye dark glossy slate-coloured, bare skin behind whitish; bill dark tomato-red, slightly yellow at tip; legs and toes orange, nails horny. The blood-orange ring on the outer edge of the iris is not noticeable till the lid is turned back.]

211. PRIONOPS TALACOMA.

Z. Ntambana Hills, Aug. (1); Tv. Woodbush, May, June (12); Klein Letaba, Aug. (3); Legogot, Apl. (2); P. Coguno, June, Aug., Sept. (6); Beira, Feb. (4); Tete, Aug., Sept. (5).

["Ipelufu" of Zulus.

The Helmet-Shrike was first seen in Zululand, where a small party of eight individuals was observed in a grove of "fever" trees at the southern end of the Ntambana Hills; it was not met with south or west of that locality. I have since noted it from the Eastern and North-Eastern Transvaal and the Inhambane, Beira, and Tete districts of Portuguese East Africa.

This species is undoubtedly migratory to a certain extent; and I at first thought that it was only a winter visitor to South Africa, as all the examples that I have taken or seen have been met with between April and September; but I find that there are five specimens in the British Museum

from Damaraland, Matabeleland, Mashonaland, and the Transvaal, taken between November and January, which dispose of this theory. Therefore only local migrations take place, probably dependent on food or rain.

It was seen in the Woodbush, North-Eastern Transvaal, in May and June; but on my return from the Klein Letaba in October none were seen, although I was in the Woodbush from that month until February. And, again, although the summer months between October and March were spent in the Beira district, this species did not appear till the 10th of February, and the natives informed me it was usually absent during the Christmas months.

This Shrike is usually seen in parties of from six to twenty individuals in open forest country or native clearings, searching for insects of various kinds, which it catches both on the ground and among the foliage and branches; unless alarmed it does not usually frequent the tops of the trees. It is somewhat fearless and easily secured, and if by chance the wing of one is only broken and it is left or caught and made to call, the whole flock will return again and again, and many specimens can be shot. Its usual call is of several notes, somewhat liquid in tone, but not easily described, uttered continually both when sitting and flying. When handled it makes a sharp snapping with the beak.

The soft parts are :---

♀, Zululand. Irides pale Naples yellow; eyelid lemoncoloured; bill black; legs and toes yellowish brown.

2, N.E. Transvaal. Irides pale lemon-coloured; eyelid lemon-chrome; bill black; legs and toes dull tomato-red.]

212. CRATEROPUS JARDINII.

Tv. Klein Letaba, July, Aug., Sept (6); Woodbush, May (1); Legogot, Apl., May (3).

213. CRATEROPUS JARDINII KIRKI.

P. Coguno, June (2); Masambeti, Nov. (1); Tambarara, June (1); Tete, Aug. (2).

Kirk's Babbler replaces Jardine's in the low veld and along the Zambesi. It is smaller, the wing of three males averaging 98 against 110 mm. in five males from the Transvaal, and the flanks are more distinctly washed with a pale rusty brown.

[This Babbling Thrush was not observed till the Transvaal was reached, but it was commonly seen in the Eastern and North-Eastern districts, and in the Inhambane, Beira, Gorongoza, and Tete districts of Portuguese East Africa.

This species is gregarious in habits, usually being found in flocks of a dozen or more individuals, and betraying its presence by its continual and loud cackling, which when the whole flock is calling can be heard at a considerable distance. It frequents well-timbered country, where it is partial to the thickets and undergrowth, and feeds principally upon insects. The flight is low and straight, and only from one sheltered position to another. I have not seen it otherwise than in flocks, and have not observed it breeding.

The soft parts are :--

Irides of two colours, inner ring orange-yellow, outer blood-orange; bill, legs and toes black.

In the young the irides are greyish yellow; bill, legs and toes blackish horn-coloured.]

217. Pycnonotus capensis.

CC. Klipfontein, Apl., May (3); Tokai, vear Cape Town, Feb. (2); Durban Rd., Mch., Sept. (6); Plettenberg Bay, Mch. (1).

The single bird collected at Plettenberg Bay on March 9 is just finishing its moult, and has the tail-feathers strongly graduated; the outer pair are the shortest and do not reach beyond the toes, the others are all very regularly graduated to the central four, which are equal and of normal length.

["Geelgat" of Cape Colonists.

In Namaqualand, the Cape Peninsula, and the Knysna district of Cape Colony only, have I observed this species. It is very common in all three localities, and generally frequents cultivated lands and the vicinity of homesteads and villages; it does considerable damage to all kinds of fruit when in season; at other times it feeds on wild berries and probably to a certain extent on insects. Although I have often found the nests, I have not succeeded in obtaining the eggs. The call is a sharp "pinc pinc" continuously uttered.

The soft parts are :---Irides dark hazel; eyelid dark plum, powdered with white; bill and legs and toes black.]

219. Pycnonotus layardi.

Z. Sibudeni, Nov. (1); Jususie Valley, Nov., Dec. (5); Umfolosi Station, Aug. (1); Hluhluwe Stream, Aug. (1); Ngoye Hills, Oct. (2); **Tv.** Zuurbron, Apl., May (3); Woodbush, Dec. (1); Klein Letaba, July, Aug., Sept. (4); Legogot, May (1); **P.** Coguno, July, Aug. (2); Masambeti, Nov. (1); Beira, Nov., Dec., Jan. (3); Tambarara, Mch., July (2); Tete, Aug. (1).

["Poativa" or "Isaponya" of Zulus.

Commonly observed in Natal, Zululand, the South-Eastern, Eastern, and North-Eastern Transvaal, round Pretoria, and in the Inhambane, Beira, Gorongoza, and Tete districts of Portuguese East Africa.

This is a very common bird everywhere, and does great damage to fruit. I do not believe that these Bulbuls are gregarious in the true sense of the word, though congregating at common feeding-grounds. The call is not unlike that of the Cape Bulbul. When alarmed or excited through the intrusion of banoks or snakes, this species is very noisy and will approach the object very close, keeping continually on the move and constantly raising and lowering the crest and jerking the tail up and down. It usually places its nest in the fork of a tree, but I have seen it sandwiched between the leaves of bananas.

The soft parts are :--Irides dark brown, no wattle; bill, legs and toes black.]

220. Pycnonotus nigricans.

CC. Klipfontein, Apl. (2).

[Since the Central Cape Colony trip, this Bulbul has only been found in Namaqualand, where it is not nearly so common as *P. capensis*. It closely resembles that species in habits and call.

The soft parts are:-Irides red-brown, eyelid orange; bill and legs black.] 221. Andropadus importunus.

CC. Slopes of Table Mt., Jan. (1); Tokai, Feb. (1); Knysna, Dec., Jan. (5); **Z.** Ngoye Hills, Sept., Oct. (4); Sibudeni, Oct., Nov. (4); **Tv.** Woodbush, Nov. (3).

The examples from Cape Colony are of a perceptibly darker shade above and more ashy below; those from Zululand and the Transvaal are of a slightly brighter olivegreen above and more yellow below, especially on the middle of the abdomen. I am not inclined, however, to give a new name to the Eastern bird.

["Bosch-fink" of Cape Colonists. "Umboni" of Zulus.

This is the commonest of the Bulbuls, and has been noted from every wooded locality visited from the Cape Peninsula, through Eastern and East Central South Africa, to the Zambesi.

It is essentially a bird of the woods and forests, and in many localities shy and difficult of approach, although it can always be seen and heard. Its favourite habit is to sit either on the topmost twig or just within the topmost branches of some tallish tree, and from these to give forth its well-known "song," which is composed of several repeated whistles, the last being very low and drawn out, and not heard unless at close quarters. It has a call somewhat like that of a Sparrow, but sharper.

The soft parts are :--Irides pale yellow or pale greyish yellow; bill, legs and toes blackish brown.]

223. Chlorocichla flaviventris.

N. Illovo, Nov. (1); Z. Ngoye Hills, Oct. (1).

This species, the type locality of which is Durban, appears to be confined to Natal and Zululand.

[Natal and Zululand are the only places where I have seen this Bulbul; it frequents the woods and forest and usually the thickest and densest parts. It is shy and retiring in habits, and, although its loud harsh alarm-note can often be heard, frequently at a distance of a few yards, it is seldom seen. It is, I believe, generally found in pairs, but, owing to the density of the localities it frequents, little could be learnt regarding its habits. The soft parts are :- Irides reddish brown ; bill brownish ; legs and toes slate-coloured.]

224. Chlorocichla occidentalis.

P. Coguno, June (1); Beira', Jan. (1); Tambarara, July (2).

I can see no distinction between the type of this species, described by Sharpe from Ovaquenyama in Northern Damaraland, birds from the Upper and Lower Zambesi Valley, Nyasaland, and the examples here catalogued. In this I am in agreement with Reichenow. Shelley separated the Zambesi Valley birds as *C. zambesiæ*.

[This is the Eastern and Northern representative of *C. flaviventris*, and differs nowise from that species in call or habits. The soft parts are also similar.]

226. Phyllastrephus terrestris.

Phyllastrephus capensis Stark & Sclater, Bds. S. Afr. ii. p. 71.

CC. Knysna, Dec., Jan. (2); **N.** Illovo, Nov. (1); **Z.** Sibudeni, Nov., Dec., Jan. (6).

Owing to the fact that Mr. Richmond has discovered that Swainson's 'Birds of West Africa' was published three months previously to his 'Classification of Birds,' the name of this species has to be changed from *C. capensis* to *P. terrestris*. Both names, proposed by the same author, are founded on "le Jaboteur" of Levaillant.

A nestling hardly free from down is almost exactly similar to the adult in coloration.

[I have noted this bird from Knysna, Natal, and Zululand. It is essentially a woodland species, and is usually found in small parties; it frequents the thick undergrowth, spending much of its time on the ground and scraping among the dead leaves, the rustle of which I have often mistaken for that of some large animal moving about. Unless disturbed it is silent, but when alarmed it utters a loud harsh note of "churr churr" (the r's being rolled), constantly repeated by the whole party.

The soft parts are :--Irides reddish brown; bill brown, base of lower mandible slaty; legs and toes livid.]

227. PHYLLASTREPHUS STREPITANS.

P. Coguno, Aug., Sept. (2); Beira, Dec. (2); Tambarara, June (3); Tete, Sept. (1).

[This species was found in the Portuguese country from the Inhambane district to the Zambesi. In habits, call, and soft parts it resembles *P. terrestris*.]

228. Bleda flavostriata.

Z. Ngoye Hills, Oct. (3); Tv. Woodbush, Feb., May, Nov. (7).

[I have only found this Bulbul in the Ngoye Forest and Zululand and the forests of the Woodbush in the North-Eastern Transvaal.

It is usually found in small parties of about half a dozen in the depth of the forest, running about the limbs of the trees in search of insects, and much resembling a Woodpecker or Creeper; it often hangs head downwards on the upright sides of the trunks. Its flight is slow and undulating, and only from tree to tree, while the call is loud and clear. It is fearless and tame, and can generally be easily secured. I have not found it breeding.

The soft parts are :--Irides hazel; bill, legs and toes ash-coloured.]

229. PARISOMA SUBCÆRULEUM.

Tv. Turfloop, Mch. (1).

[This species was not seen in Namaqualand, although a careful look out was kept for it, and it was not till I reached the North-Eastern Transvaal that I came across it. There it is not common, and only some half a dozen individuals were observed; it is found only in the undulating country that extends round Pietersburg for many miles and there frequents the few bushes that exist, especially the little belts of thorns and dogwood that line the courses of the sand rivers. In habits and call it resembles *P. layardi*.

The soft parts are :--Irides very pale yellow; bill dark horn-coloured; legs black.]

240. PARISOMA LAYARDI.

CC. Klipfontein, Apl., May, June (6).

[Since the Central Cape Colony trip, Namaqualand is the only locality where I have seen this Tit-Babbler. It was there quite common and frequented the bushes both on the flats and in the mountains, but was not observed in the sand-belt near the coast. It is especially fond of the numerous kloofs, where the bush is always somewhat thicker. It is found singly or in pairs and is very active, carefully searching every branch for food; the flight is quick and jerky, and only from bush to bush. It has a sharp call-note, and the males often indulge in a sweet warble, which is uttered from the centre of a bush.

It was not, I think, breeding when I visited Namaqualand.

The soft parts are :--Irides pale yellowish white; bill black; legs and toes dark brown.]

231. PARISOMA PLUMBEUM.

Tv. Woodbush, June (1).

[The specimen secured is the only one of this species that I have seen; it was shot sitting on the post of some wire fencing near a bush-filled stream. It was solitary and did not call.

The soft parts are :--Irides pale yellow; bill dark brown, paler at base of lower mandible; legs and toes very dark slate-coloured.]

234. Phylloscopus trochilus.

Z. Sibudeni, Dec. 16 & 29, Jan. 23 & 24 (4); **Tv.** Woodbush, Jan. 9 & 15 (2).

[The Willow-Warbler visits South Africa in the summer season, and I have observed it in Zululand and the North-Eastern Transvaal at that time of year. In Zululand in January 1904 it was particularly plentiful, and its well-known call-note could be heard in every plantation and garden. In its winter-quarters it does not sing, its call-note alone betraying its presence. 'fhe specimens taken were shot in December and January, and are all in moult. A male shot on the 9th of January is somewhat later than the others.]

CALAMOCICHLA ZULUENSIS.

Neumann, Bull. Brit. Orn. Club, xx. 1908, p. 96, and Nov. Zool. xv. 1908, p. 248.

P. Coguno, June (1 3).

This species closely resembles *C. gracilirostris* (described in part as *Bradypterus babæcula* Stark & Selater, vol. ii. p. 102), but is distinguished by its smaller size, the wing measuring 76 against about 72 mm. Only two examples are as yet known—the present specimen, a male, dated June 29; and the type, a female in the Tring Museum, collected by the Woodward brothers at Eshowe in Zululand.

[This bird was not uncommon around Coguno, where it frequented the dense reed-beds along the rivers and on the swamps; but it was seldom seen, although always heard. It has all the habits and actions of an *Acrocephalus*, and its "Reed-Warbler" song could always be heard, especially on warm muggy evenings and throughout the early night.

The soft parts are :--Irides pale brown ; bill brown, paler at base of lower mandible ; legs and toes darkish brown.]

241. CRYPTILLAS VICTORINI.

CC. Knysna, Jan. $(1 \ \varrho)$.

[I have only once seen this species, when the specimen secured was taken. This was one of a pair that were creeping about some thick underwood in the depths of the Knysna forest. Both were uttering a low call-note.

The soft parts are :--Irides deep brown ; bill, upper mandible blackish brown, base of lower pale brown; legs and toes brown.]

243. BRADYPTERUS BRADYPTERUS.

CC. Plettenberg Bay, Mch. (2); **Z.** Umfolosi Station, July (1).

[Zululand and the Knysna district are the only localities where I have taken this Reed-Warbler, but I have undoubtedly overlooked it elsewhere. It frequents long grass

and reeds in swampy localities, and has much the habits of a true Reed-Warbler, sliding up and down the reeds and seldom flying. The call is loud and harsh, and it is probably this bird that I have heard in most localities visited where swamps or reedy rivers exist.

The soft parts are :--Irides hazel; bill, upper mandible dark brown, lower much paler; legs and toes brown.]

247. SCHENICOLA APICALIS.

Z. Umfolosi Station, Sept. (2).

This is a rare, or, at any rate, a very local, species in South Africa. The British Museum has examples only from Pinetown and Durban in Natal; but it was also recorded from Zululand by the Woodwards and from Mashonaland by Marshall and Swynnerton.

[The two birds brought home are the only specimens I have seen. Both were flushed in long grass growing in swampy ground bordering a lagoon.

The soft parts are :—Irides pale horn-coloured ; bill, upper mandible dark horn-coloured, lower pale horn-coloured ; legs and toes fleshy.]

249. EREMOMELA POLIOXANTHA.

Tv. Klein Letaba, July (1).

A rare bird, only known in South Africa from Swaziland (whence came Buckley's type), Komatipoort (*Francis*, in S.A. Mus.), and the Umfuli River, Mashonaland (*Jameson*).

[The specimen brought home is the only one I have ever seen; it was solitary, and was creeping about at the top of a large "wait-a-bit" thorn-tree on the banks of the Klein Letaba River.

Soft parts not recorded.]

252. EREMOMELA SCOTOPS.

Tv. Klein Letaba, Aug., Sept. (6); **P.** Tambarara, Mch. (1).

[This Bush-Warbler was noted in the "bush veld" of the North-Eastern Transvaal, where it was common, and the single specimen was taken from a small flock in the

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Gorongcza forests in Portuguese East Africa. It was usually observed in small parties diligently searching for insects in the tops of the larger trees along the river-banks.

It is an active bird, keeping continually on the move and constantly calling; in this respect and in its movements it much resembles the White-eyes.

The soft parts are :---Irides very pale yellow; bill dusky black; legs yellowish brown; toes much paler.]

253. CAMAROPTERA BRACHYURA.

Cameroptera brachyura (Vieill.); Reichenow, Vög. Afr. iii p. 618.

Z. Sibudeni, Oct. (1); Umfolosi, Aug. (1); Ngoye Hills, Oct. (2); **P.** Coguno, Sept. (1).

["Imbuzana" (Little Goat-Kid) of Zulus.

I have noted this Warbler from Knysna, Natal and Zululand, and the Inhambane district of the Portuguese country. It is a woodland-haunting species, and is usually observed singly, creeping about the thick undergrowth and thickets. Its peculiar kid-like call is remarkably loud for so small a bird and is decidedly ventriloquial, while it is impossible to locate the bird by listening to it, and it is only by careful watching that it can at last be detected.

The soft parts are :--Irides yellow ; bill black ; legs and toes fleshy.]

255. CAMAROPTERA GRISEOVIRIDIS.

Camaroptera brevicaudata Stark & Sclater, Bds. S. Afr. ii. p. 114.

P. Beira, May (1); Tambarara, May (1).

The birds from Beira and Tambarara undoubtedly belong to this widely spread tropical species, which seems to replace *C. olivacea* in the northern portion of Portuguese East Africa.

[This species was noticed sparingly in the Beira and Gorongoza districts, and frequented the undergrowth and thickets in the woods and forests. Its call, actions, and habits resemble those of C. olivacea.

The soft parts are :--Irides raw sienna; eyelid slightly yellow; bill black; legs and toes fleshy.]

256. Sylviella Rufescens.

CC. Klipfontein, Apl., May, June, July (7); Durban Rd., Sept. (1); Tv. Klein Letaba, July, Sept. (2).

["Crombec"=Wry-beak of Colonists.

This species was found in Namaqualand, the Cape Peninsula, and the North-Eastern Transvaal. It was particularly plentiful in the former locality. Usually observed in pairs, sometimes singly, it frequents all bushed country and orchards and gardens, where it does no inconsiderable amount of good in clearing off insects. In actions, habits, and appearance it greatly resembles the European Wren (Anorthura troglodytes), the call and alarm-note being almost identical.

The soft parts are :---Irides raw umber; bill horny brown, paler at base of lower mandible; legs and toes brown.]

257. SYLVIELLA PALLIDA.

P. Tete, Aug., Sept. (2).

[Observed only in Tete, where it was scarce. In habits it resembles *S. rufescens*, except that the call and alarm-note are similar to those of *S. whytii*. The soft parts are similar to those of *S. rufescens*.]

Sylviella whytii.

P. Masambeti, Oct. (3).

This species was described by Shelley from examples taken by Whyte (after whom it was named) at Zomba. Swynnerton ('Ibis,' 1907, p. 56, and 1908, p. 73) first recorded it from South Africa. He obtained it in Gazaland, S. Rhodesia. Since then it has been noticed by Sheppard near Beira (J. S.A. O. U. v. p. 32).

Its small size, buffy cheeks and superciliary stripes, and the absence of a black band through the eye separating these, distinguish it at once from the other two South-African species.

[This species was found near Beira, where it was decidedly scarce, only two pairs being observed. In habits and actions it resembles *S. rufescens*, but the call and alarm-note are sharper and clearer.

The soft parts are :--Irides rich brown; bill pale horny brown, much paler at base of lower mandible; legs and toes palish amber-brown]

258. CRYPTOLOPHA RUFICAPILLA.

CC. Knysna, Jan., Feb. (5); Z. Sibudeni, Nov., Jan. (2); Tv. Zuurbron, May (3); Woodbush Hills, Nov. (2).

["Nceti" of Zulus.

This little Flycatcher was common in the forests of the Knysna district, Zululand, and the South-Eastern and North-Eastern Transvaal, but was seen nowhere in the Portuguese country. I have only found it singly and in the depths of the forests, where it potters about from bush to bush searching for insects much like a Goldcrest (*Regulus regulus*); it has a single low call of "zip," constantly repeated.

The soft parts are :---Irides hazel; bill, upper mandible brownish black, lower pale yellowish; legs and toes dark brown.]

259. Apalis thoracica.

N. Illovo, Nov. (1); Tv. Zuurbron, May (2); Woodbush, Nov. (4); Turfloop, Mch. (1).

[The Bar-breasted Warbler was noted only from Natal and Zululand, and the South-Eastern and North-Eastern Transvaal. It is a woodland-haunting species, and is usually observed in pairs creeping about in search of insects in the undergrowth and lower branches. It has a loud call for so small a bird, and often indulges in a wild warbling song. It is not an inconspicuous species, and cannot easily be passed over.

I have not found the nest or eggs.

The soft parts are :--Irides very pale yellow; bill black; legs and toes amber-brown.

In the young the irides are dirty white; bill dusky, very pale yellow at gape; legs and toes paler than adult.]

APALIS CLAUDEI. (Plate IV. fig. 2.)

W. Sclater, Bull. B. O. C. xxvii. Nov. 1910, p. 15.

CC. Knysna, Jan. (3); Plettenberg Bay, Mch. (1).

Hitherto two quite distinct species have been confused under the name of *A. thoracica*. The differences between the two are briefly as follows.

A. claudei.—Above dark slaty grey throughout, with the faintest perceptible wash of olive; ear-coverts slightly paler than the back, a black spot in front of the eye; below, throat white separated from the abdomen by a black transverse band; remaining under parts white in the centre, olivebrown on the flanks and under tail-coverts. Tail with two or three outer tail-feathers tipped with white, the outermost chiefly white.

Length about 130 mm., wing 50, tail 57, tarsus 20, culmen 13.

Type from Plettenberg Bay, a male killed March 12, 1905.

This species differs from *A. thoracica* in having the back dark slaty grey instead of olive-green and in the entire absence of any yellow on the lower side; the dimensions seem very similar. The sexes in both species are alike, and the young birds differ from the adults in the absence of the black chest-band.

In addition to those mentioned above, the British Museum contains examples of this new species from Knysna (Andersson, Dec. 2nd, 1865) and Grahamstown; while of A. thoracica there are examples from Port Elizabeth (Rickard), King William's Town (Trevelyan, May), Pinetown (Ayres, Mch., May, July, Oct., Nov., Dec.), the Drakensberg (Butler, Aug.), Macamac (Barratt), and Rustenburg (Ayres).

Apalis thoracica was founded on "Le plastron noir" of Levaillant, whose plate and description, as also those of Shaw and Nodder and Swainson, obviously refer to the yellow-bellied form from the east of Cape Colony and Natal. I have found no name to apply to the white-bellied form, and am therefore naming it after Claude Grant. In the 'Catalogue of Birds' (vol. vii. p. 138) Sharpe suggests that the white-breasted form is the breedingplumage, but the long dated series of the true *A. thoracica* from Pinetown in the British Museum Collection shews that this obviously cannot be the case.

APALIS RUDDI. (Plate IV. fig. 1.) Claude Grant, Bull. B. O. C. xxi, 1908, p. 93.

P. Coguno, Sept. 8 (1).

This new species, of which only one example was obtained, comes nearest to A. griseiceps Reich. & Neum., figured in the Journ. f. Orn. (1900, pl. 2. fig. 2), from Kilimanjaro. It differs from it, as also from A. thoracica, in its olive-green tail and in the absence of any white on the outer tailfeathers. It appears to be quite a distinct form.

[Only a pair of this Warbler was seen, the male of which was shot. They were creeping about some thick vegetation at the edge of a wood and were particularly tame, although when I fired the female disappeared and I was unable to again find her. They were uttering a low call and were diligently searching for insects; except for the conspicuous breast-band, they could easily be mistaken for *Euprinodes neglectus*.

The soft parts are :- Irides amber-yellow; bill black; legs and toes palish brown.]

260. Stenostira scita.

CC. Klipfontein, Apl. (2).

[This graceful and dainty little bird is decidedly scarce in Namaqualand, which is the only locality where I have observed it since the Central Cape Colony trip. I saw three parties of three or four individuals; it frequents the bushes both on the flats and the mountain-sides, and is very active in its habits, diligently searching for insects after the manner of a Warbler. It has a quick jerky flight, usually only from bush to bush, and the call is Flycatcher-like, but sharper.

The soft parts are:-Irides hazel; bill, legs and toes black.]



H.Grönvold del.et lith.

1. APALIS RUDDI J. 2. " CLAUDI J. West, Newman imp.

262. EUPRINODES FLORISUGA.

Apalis florisuga Reichenow, Vög. Afr. iii. p. 610.

Z. Umfolosi Station, July, Sept. (2); Tv. Woodbush, Jan. (1); Klein Letaba, Sept. (3); Legogot, Apl. (1);
P. Coguno, June, Aug. (4); Tambarara, May (1); Tete, Sept. (1).

This Bush-Warbler was first distinguished by Reichenow (Journ. f. Orn. 1898, p. 314), whose name it should bear. I cannot separate Alexander's *E. neglecta*, of which I have examined a typical example, from the ordinary South-East African form.

[This dainty little Bush-Warbler was noted from Zululand, the Eastern and North-Eastern Transvaal, and the Inhambane, Beira, Gorongoza, and Tete districts of Portuguese East Africa. It frequents both woods and forests and the ordinary "bush veld" country, where I have usually observed it in pairs, but occasionally in small parties.

Except for a low call-note it is a quiet and inconspicuous species, harmonizing wonderfully with the green foliage of the bushes, about which it actively creeps from branch to branch, diligently searching for insects, on which, I believe, it exclusively lives. It has a quick jerky flight as it moves from bush to bush.

The soft parts are :--Irides pale amber-yellow; eyelid pale orange; bill blackish brown; legs and toes palish brown.]

264. DRYODROMAS ICTEROPYGIALIS.

CC. Klipfontein, May, June (4).

[Since the Central Cape Colony trip this Warbler has only been noted from Namaqualand, where it is by no means plentiful. It frequents the bushes both on the flats and on the mountain-sides, and is usually found in small parties, diligently searching for insects, on which it feeds, and continually calling in a low note.

The soft parts are :--Irides bright yellow; bill blackish horn-coloured; legs and toes darkish brown.]

265. CALAMONASTES FASCIOLATUS.

Tv. Klein Letaba, Sept. (1); Turfloop, Mch. (1).

[On only two occasions have I seen this striking Wren-Warbler—once when a pair were seen hunting in the lower branches of a thorn-tree in the "bush veld" of the North-Eastern Transvaal, and again when a single female was seen and shot on a rocky kopje overgrown with a small euphorbia and thickets of "Num-num." It has a sharp alarm-note, and in habits and actions is not unlike the European Wren (Anorthura troglodytes).

The soft parts are :--

 \mathcal{J} . Irides pale hazel; bill dark brown; legs and toes fleshy-brown.

 \mathfrak{P} . Similar to \mathfrak{F} , but greater part of the lower mandible pale brown.]

267. PRINIA HYPOXANTHA.

Tv. Woodbush, Nov. (2).

[The pair brought home are, curiously enough, the only specimens I have seen of this species. These were frequenting the long thick grass and vegetation bordering a mountain stream, and in appearance and call resembled *P. mystacea*. They were probably breeding, but I could not discover the nest.

The soft parts are : - Irides hazel; bill black; legs and toes pale brown.]

268. PRINIA MACULOSA.

CC. Klipfontein, May, June (4); Port Nolloth, July (1); slopes of Table Mt., Jan. (3); Plettenberg Bay, Feb., Mch. (2).

["Tentenki" of Colonists.

Namaqualand, the Cape Peninsula, and the Knysna district are the only localities in which I have seen the Cape Wren-Warbler. It is plentiful everywhere, and frequents the scrubby bush on the flats and hill-sides. It is an exceedingly lively and active little bird, and is generally found in pairs. It is often seen perched on the tops of the bushes, uttering at intervals a chirpy note and continually jerking the tail up and down; when creeping about among the vegetation the tail is held up, which gives the bird a perky and graceful appearance.

The soft parts are :--- Irides light hazel; bill black; legs and toes palish brown.]

269. PRINIA MYSTACEA.

N. Illovo, Nov. (1); Jususie Valley, Dec. (3); **Tv.** Klein Letaba, Aug., Sept. (2); **P.** Beira, Jan., Nov. (2); Tete, Sept. (1).

["Nceti" of Zulus. "Stini" of Ntebis.

This Wren-Warbler was noted commonly from Natal and Zululand, the Eastern and North-Eastern Transvaal, and the Beira, Gorongoza, and Tete districts of Portuguese East Africa.

Observed in pairs or small family-parties, it frequents the long grass and vegetation in vleis and swamps at the edge of woods and in old native clearings. It is an active and graceful little bird as it creeps and flits about in search of insect food, and often feeds on the ground; but when disturbed it always perches on the tops of the vegetation, uttering a sharp call and jerking the tail up and down. In this respect and other actions it closely resembles *P. maculosa* of the Cape Colony.

The soft parts are :--Irides pale brown; bill black; legs and toes pale brown.

270. PRINIA FLAVICANS.

Tv. Pietersburg, Feb., Mch. (3); Turfloop, Mch. (1).

[I only observed this bird on the flats around Pietersburg, where it was not uncommon and frequented the long grass in the valleys. Usually found in pairs, it is very active and lively in habits and much resembles *P. mystacea* in call and actions.

The soft parts are :---Irides raw sienna; bill black; legs and toes brownish flesh-coloured.]

271. Spiloptila ocularia.

CC. Klipfontein, Apl., July (3).

["Tentenki" and "Klop-kloppie" of Colonists.

Namaqualand is the only locality where I have seen this

species since the Central Cape Colony trip. It is an active little bird, usually found in pairs; it frequents the bushes everywhere, and spends much of its time searching for insects. It has a jerky flight and is very Wren-like in habits.

The soft parts are :--Irides grey-brown; bill black, base lilac; legs and toes brownish flesh-coloured.]

272. CISTICOLA FULVICAPILLA.

CC. Plettenberg Bay, Mch. (2); N. Illovo, Nov. (1).

This species is apparently confined to the southern part of Cape Colony and the coast lands of Natal. The British Museum contains examples from Swellendam, George, Knysna, King William's Town (Jan., Oct.), and Pinetown near Durban (Jan., Mch., May, June, July, and Oct.).

The specimens with buffy-whitish under parts, mentioned by Sharpe as being this species in winter dress and from the Transvaal, should be referred, in my opinion, to *C. cinnamomeiceps* recently described by Haagner.

[This little Grass-Warbler was noted from the Knysna district, where it was decidedly scarce, and Natal. It inhabits the long grass and vegetation in the vleis and bordering woods, and is usually observed in pairs. Its call is "weep weep," constantly repeated; in other respects and appearance it much resembles *C. subruficapilla*.

The soft parts are :--Irides pale amber-coloured; bill, upper mandible horn-brown, lower much paler; legs and toes palish brown.]

CISTICOLA CINNAMOMEICEPS.

Haagner, Annals Transvaal Mus. i. p. 197 (Jan. 1909).

Tv. Klein Letaba, July, Aug., Sept. (3); Legogot, Apl., May (2); **P.** Coguno, Aug. (2).

These little Grass-Warblers closely resemble C. fulvicapilla, with which, indeed, they have been hitherto confounded. The series of specimens of both forms now in the British Museum shew clearly that C. cinnamomeiceps cannot be the winter dress of C. fulvicapilla, as was supposed by Sharpe, but is its representative in the Transvaal and Rhodesia.

In the British Museum series there are skins from Potchefstroom (Jan., July), and Rustenburg (Feb., Apl., May, June, July, Aug.) in the Transvaal, Kanye (Jan.) in Bechuanaland, Matje Umschlope in Bulawayo (Nov.), and Umfuli River in Rhodesia, and Elephant Vley in German S.W. Africa. One skin from Pinetown taken in May also seems to be referable to this species, but perhaps this may be due to a confusion of label-tickets, as Ayres collected both in Pinetown and Potchefstroom.

273. CISTICOLA RUFICAPILLA.

Cisticola aberrans Stark & Sclater, Bds. S. Afr. ii. p. 143. **Z.** Sibudeni, Nov. (1); **Tv.** Zuurbron, May (1); Woodbush, Jan., May (2); Turfloop, Mch. (1).

The oldest name for this bird is *C. ruficapilla* Smith, published in 1842. Fraser applied the same name to another species of the genus from West Africa in the following year.

["Nceti" of Zulus.

Zululand and the South-Eastern and North-Eastern Transvaal are the only localities where I have taken this species; it is probable that it exists in the intermediate country, but it is extremely difficult to name these birds at sight, and, except where long periods are spent in a locality, they are often passed over, owing in many places to the density and length of the grass and vegetation at certain seasons.

Usually observed singly or in pairs, the bird frequents long grass in the valleys or thick vegetation bordering the woods and streams. Like the other Grass-Warblers, it has a weak flight, and when creeping about and just after perching it raises the tail and slightly spreads it. It feeds entirely on insects, and the call is a single weak chirp.

The soft parts are :---Irides raw sienna; bill horn-coloured, lower mandible pale slate-coloured; legs and toes amberbrown.]

276. CISTICOLA RUFA.

P. Beira, Jan., Dec. (3).

[" Stini " of Ntebis.

This species was only found near Beira, where it was not uncommon. I have only observed it singly; it frequents the long grass and vegetation in the vleis and the borders of woods and deserted native lands. It is very active in habits, the call being a sharp squeaky note; flight is seldom indulged in.

The soft parts are :--Irides raw sienna; bill brown, paler at base of lower mandible; legs and toes amber-coloured.]

278. CISTICOLA TINNIENS.

Tv. Woodbush, Nov. (7).

[Curiously enough, I have only seen this rather striking Grass-Warbler in the Woodbush Hills of the North-Eastern Transvaal, where it was quite plentiful and frequented the long grass and rough vegetation in the vleis and along the numerous streams. It is a very active bird and has a loud mellow call, and is usually observed in pairs. It was probably breeding in this locality, as it was the summer season, but no nests were discovered.

The soft parts are :--

 ${\mathcal S}$. Irides hazel ; bill black with, in most specimens, a spot of paler colour on the lower mandible ; legs and toes amberbrown.

In the female practically the whole of the lower mandible is pale.]

279. CISTICOLA TERRESTRIS.

N. Illovo, Nov. (1); Z. Umfolosi Station, June, Aug. (5); Tv. Wakkerstroom, Mch., Apl. (2); Woodbush, June, Nov., Dec. (5); Pietersburg, Mch. (1); P. Masambeti, Oct. (1).

[The specimen with the long tail, shot on the 24th of October at Beira, is probably a late bird, and has not yet assumed the summer plumage. The female shot on the 20th of June at Woodbush is a remarkably pale specimen, but has all the markings of *C. terrestris*.

This little Grass-bird was noted from Natal and Zululand, and the South-Eastern and North-Eastern Transvaal. It is usually found in pairs, and frequents, more or less, open grass-country, spending most of its time on the ground. When flushed it rises with a jerky flight and utters several sharp notes.]

281. CISTICOLA SUBRUFICAPILLA.

CC. Klipfontein, Apl., June (3).

These skins appear to me to represent the true *C. subruficapilla*; I have compared them with the type of the species in the British Museum, and they agree with it very well.

The distinguishing characters are :---

1. The ashy-grey under parts become nearly white in the centre of the abdomen, but with no fulvous or rufous tinge.

2. The slaty-grey back has narrow and, as a rule, not strongly marked black centres.

3. The head is washed with rufous and gradually fades into the grey of the back, and is never in strong contrast to it; like the back it is streaked, but faintly and not conspicuously.

In the British Museum there are skins, in every way conforming to this type, from Cape Town (Nov.), Deelfontein (March, May, and August), Port Nolloth (July), and Piquetberg (Aug.).

It appears, therefore, to be confined to the western portion of Cape Colony, while its place is taken further east and north by the following.

281 a. CISTICOLA CHINIANA.

CC. Plettenberg Bay, Feb. (2) ; Z. Sibudeni, Oct., Nov., Dec., Jan. (4); Umfolosi, June, July, Aug., Sept. (8); Tv. Zuurbron, May (4); Woodbush, Nov. (2); Klein Letaba, Aug. (1); P. Coguno, June, Aug., Sept. (6).

This species varies a good deal in size. Two of the birds from Coguno, both males, and both taken the same month, measure as follows :—

(a) Length 135 mm.; wing 67; tail 61; tarsus 22; culmen 13.

(b) Length 118 mm.; wing 53; tail 50; tarsus 21; culmen 12.5.

Two males marked "Umfolosi," also both taken in June, are nearly as divergent in measurement. The birds killed in winter have the heads almost plain, while those killed in summer (November to January) have the heads strongly streaked. 283. CISTICOLA NATALENSIS.

Summer dress—**Z.** Sibudeni, Nov. 1 (1); Jususie Valley, Dec. 1 & 6 (2); Ngoye Hills, Oct. 13 (1); **P.** Beira, Dec. 17, Jan. 27 (6).

Winter dress—Z. Umfolosi Station, June 25, Sept. 7 (10); P. Masambeti, Nov. 17 (1).

This series shews very well the great difference in appearance in this species in winter and summer—in fact, no one would imagine the birds were the same species, so distinct are they. I suspect that the bird alluded to by Haagner (Ann. Transvaal Mus. i. p. 229) as *C. strangei* is nothing but the summer dress of *C. natalensis*; indeed, I very much doubt if the true *C. strangei* of West Africa can be distinguished from *C. natalensis*, except as a subspecies.

The series also shews the great difference in size in the two sexes, a very characteristic feature. The wings of eight males average 70 mm., varying from 68 to 73, and of eight females average 58, varying from 55 to 61.

[" Nqojane" of Zulus.

I have only seen this large Grass-Warbler in Zululand and the Beira district of the Portuguese country. It is a conspicuous species, and cannot be easily overlooked. It frequents open marshy valleys and plains, and is particularly plentiful in the low-lying country near Beira. It is usually seen perched on the top of some twig or bush, and utters a loud call, especially in the early morning and late afternoon. On being disturbed it flies round the intruder, uttering a single note, but at other times I have seen it soar to some height, usually from the top of a bush, to which it again returns. It feeds on insects and, to a certain extent, on grass-seeds. I have not taken the nest.

The soft parts are :---

Winter. Irides pale brown; bill pale horn-coloured, round nostrils and along culmen darker; legs and toes amberbrown.

Summer. Bill practically black, white-horn-coloured on hinder side of lower mandible; legs and toes darker than in winter.]

HELIOLAIS KIRBYI.

Haagner, Ann. Transvaal Mus. i., Aug. 1909, p. 233. P. Tambarara, Mch. (13).

To this recently described species from Boror I refer Mr. Grant's Gorongoza example, identified by him as Orthotomus erythropterus (Bull. B. O. C. xxi. 1908, p. 93), and also Mr. Swynnerton's Kurumadzi example from the frontier of Rhodesia and Mozambique ('Ibis,' 1908, p. 80), identified by him as Heliolais erythroptera.

This species differs from *H. erythroptera*, the type of which was taken on the Gold Coast, in the absence of the reddish shade of the upper parts and the much paler colour of the under parts. It is also rather smaller, the wing measuring 50 mm. against 56 in *H. erythroptera*.

[The Beira and Gorongoza districts of the Portuguese country are the only localities where I have seen this bird. It has much the habit and appearance of a *Cisticola* or *Prinia*, and haunts the long grass and low bushes like those birds; but the call-note is much sharper and louder than that of any of the Grass-birds found in these districts, and the red wings are conspicuous, both in flight and when the bird is sitting. It is not common, and often frequents such thick situations that it cannot be seen. Its call first drew my attention to it.

The soft parts are :---Irides pale yellow; bill horncoloured, yellowish at base and gape; legs and toes amberbrown.]

290. Spheneacus africanus.

CC. Table Mt. slopes, Jan., Feb. (5); Durban Rd., Sept. (1); Knysna, Apl. (1); Plettenberg Bay, Feb., Mch. (2).

["Vlei duiker" of Cape Colonists.

I have only found this bird in the Cape Peninsula and the Knysna district, in both of which localities it is common. It frequents the long grass and bush, both on the flats and the hill-sides, and is found either solitary or in pairs. It seldom flies, and when alarmed dives into the depths of the herbage, and is extremely difficult to flush. The flight, when indulged in, is weak and of short duration. The call is sharp and rather harsh, usually uttered from the top of a grass-stalk or stick. I have not discovered the nest.

The soft parts are :---Irides hazel; bill dark hornceloured, lower mandible slaty in parts; legs and toes brown.]

292. SPHENŒACUS NATALENSIS.

Z. Sibudeni, Nov., Jan. (2) ; **Tv.** Wakkerstroom, Apl. (1).

["Gauge" of Zulus.

This species was only observed in Natal and Zululand and the South-Eastern Transvaal. In habits, &c., it exactly resembles *S. africanus*. The soft parts are also the same.]

SPHENŒACUS TRANSVAALENSIS.

C. Grant, Bull. B. O. C. xxi. 1908, p. 92.

Tv. Woodbush Hills, Nov., Dec. (type a ♂, Nov. 11, 1905, and 4 others). One nest with two eggs taken in the Woodbush Hills, Dec. 14th.

I can hardly regard this species as distinguishable from S. natalensis, which it replaces in the North-East Transvaal. The crown is perhaps a shade darker rufous and the lower parts are more ashy and less fulvous, but it is founded on very fine distinctions. Of the Transvaal examples in the British Museum one from Swaziland is distinctly referable to S. natalensis; two others, one from Rustenburg and one from the Swart Ruggens, also in the Rustenburg District, may perhaps be united to the present race. The eggs closely resemble those of the Cape species.

[I only found this Grass-bird on the hill-sides in the Woodbush Hills, where it frequented the long grass and rough herbage on the edges of the forests. In general habits, call, and flight it resembles other members of the genus. It breeds during the summer season, and I took the nest, containing two slightly incubated eggs, on the 14th of December, 1905. The nest, which was composed of fine grass with a few dead leaves interwoven on the outside, was cup-shaped and placed in the fork of a shrub in thick vegetation at the edge of forest; it was within a foot of the ground. Only the hen bird was observed, and she was secured.]

[To be continued.]